

THE LIVES
OF
CELEBRATED ARCHITECTS,
ANCIENT AND MODERN.



6000047250

26. 594



THE LIVES
OF
CELEBRATED ARCHITECTS,
ANCIENT AND MODERN.

LONDON : PRINTED BY J. MOYES, BOUVERIE STREET.

✓
THE LIVES

Oct. 1827.
66

OF

CELEBRATED ARCHITECTS,

ANCIENT AND MODERN:

WITH

HISTORICAL AND CRITICAL OBSERVATIONS ON THEIR
WORKS, AND ON THE PRINCIPLES OF THE ART.

BY

FRANCESCO MILIZIA.

Translated from the Italian

BY MRS. EDWARD CRESY.

WITH NOTES AND ADDITIONAL LIVES.

IN TWO VOLUMES.

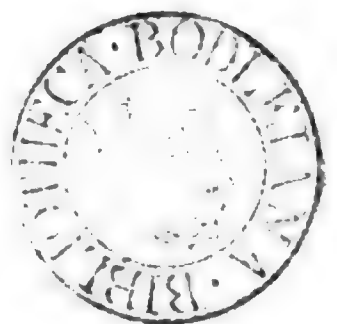
VOL. I.

LONDON:

PRINTED FOR J. TAYLOR, ARCHITECTURAL LIBRARY,
HIGH HOLBORN.

1826.

594.



TO
JOHN SOANE, Esq.
F.R.S. F.S.A.
ARCHITECT TO THE BANK OF ENGLAND,
MEMBER OF THE ACADEMIES OF PARMA AND FLORENCE,
PROFESSOR OF ARCHITECTURE IN THE ROYAL
ACADEMY,
AND ONE OF HIS MAJESTY'S ARCHITECTS ATTACHED TO
THE BOARD OF WORKS, &c. &c.

Sir,

The kind manner in which you have allowed me to place under your protection this Translation of the celebrated Work "Memorie degli Architetti Antichi e Moderni de Francesco Milizia," claims my grateful acknowledgment: no one can be better qualified to judge of its historical and scientific importance than yourself; in evidence of which, I need

only refer to your extensive and invaluable Museum, and to the many examples of classical taste and profound skill which have been erected under your direction in this Country, as proofs of your deep research in, and ardent attachment to, the noble art you profess.

With every sentiment of respect,

I remain, Sir,

Your most obedient humble Servant,

Eliza Cressy.

6, Suffolk Street, Pall Mall East, 1826.

P R E F A C E.

BIOGRAPHY is, of the various kinds of narrative writing, that which is most generally read, and most easily applied to the customary purposes of life and of art: and if to the record of the history and pursuits of scientific men be added judicious critical observations, the subject then becomes important to the historian, instructive to the professor, and interesting to every inquirer. There being in the English language no biographical history devoted to Architects, either ancient or modern, it appeared, that a translation from the best work, embracing such subjects, would be an acceptable addition to the libraries both of architects and amateurs. The celebrated work “ *Memorie degli Architetti Antichi e Moderni de Milizia*,” was therefore selected for this purpose; no other author having collected so much information, or exhibited such sound judgment, both with regard to historical research and to critical remarks. In these pages will be found

accurate descriptions of almost every building of celebrity throughout the classic countries of Greece and Italy, gleaned with much labour from ancient writers, or the result of his own knowledge on the subject. The whole forms an entire history of the progress of architecture, from its commencement to the present period ; which, if illustrated by drawings and engravings, would become a most useful guide to the young practitioner, and a complete parallel of the art. They should be arranged to suit the chronological order adopted in the text, and may be easily obtained ; portraits of the persons and representations of the buildings being by no means rare.

That Milizia's work has always been highly esteemed on the Continent, is evident by an attentive perusal of the architectural and other books connected with the subject which have been published during the last fifty years ; in many it will be found, that his opinions have been more generally adopted than acknowledged.

Milizia's observations on the Orders of Architecture, and their details, are very judicious, and worthy the consideration of every professor : these are founded on Roman examples, which at that time were principally studied. Subse-

quent researches have shewn what was the practice of the ancients; the proportions, style, and character of the works of Grecian Architects will be found among the various additions to this edition.

The historical utility of this work is much augmented by the well arranged Index which is attached. Thus, by referring to the lives of Bernini and other architects who were employed in the building of St. Peter's, there will be found an interesting and accurate account of that building, accompanied by the most profound criticisms ever published upon that celebrated structure. Of St. Paul's, also, a complete detailed historical account is inserted in the life of Sir Christopher Wren. The history of other buildings may also be traced in the same way.

The manner, also, in which the Index is arranged will be doubly serviceable; as it exhibits at one glance a catalogue of all the celebrated palaces, churches, or other modern buildings in Europe; and refers to the several accounts given of them in the work.

Milizia not having particularised the authorities from whence he drew his information, an evident defect in an historical work, the trans-

lator has spared no pains in ascertaining and examining them; and they are now attached in their respective places: an addition which must prove satisfactory to every inquiring reader, as affording him an opportunity of reference, and of deriving further information from the original sources; and may also convey some idea of the very extensive research made by our author. It should also be noticed, that the measurements generally given in the original are in Roman palms; for these, English feet and inches have been substituted, principally from the drawings and memoranda of a professional architect, collected in a tour through France, Italy, Greece, &c.; who has also supplied the additional notices of the buildings erected in England during the middle ages; also a great part of the life of Sir Christopher Wren, and all the Memoirs after page 372, vol. ii.

It has been often acknowledged, that it is more difficult to obtain a good style in a translation than in an original work; if, therefore, any formal or harsh sentences occur, the reader, it is hoped, will attribute such to a desire of giving, as near as possible, the precise meaning of the original.

It may be expected, that some account should be given of the author of this as well as many other

works of considerable merit; but it often happens to writers, that they are known only by their works; the incidents of a literary life are seldom observed, and therefore seldom recounted; and no account of Milizia is contained in any of the various biographical writings published since his death; which, considering the high rank he held in society, may be considered rather extraordinary. Fortunately, he has given us the following candid and explicit memoir, which is contained in the Preface to his “*Principi di Architettura Civile*,” seconda edizione.

“ Every man should retrace the events of his own life, in order to allow himself an opportunity of apologizing for the errors he may have committed, and to satisfy the natural curiosity of posterity. These feelings have prompted one, who has transcribed the history of so many, to sketch thus much of his own:—I was born, in 1725, at Oria, a small city of Terra d’ Otranto, in the kingdom of Naples, and am the only one remaining of an opulent and noble family in that unimportant territory. At nine years of age I was sent to Padova, where my uncle practised medicine, and had settled, in consequence of

some youthful indiscretion committed in his native town. After residing with him nearly seven years, and studying the Belles Lettres, though to little profit, a trifling dispute, in which he assumed what I then considered an undue authority over me, induced me to withdraw myself from his protection to Bobbio, near to Piacenza, from whence I wrote to my parents; and after visiting Pavia and Milan, I met my father at Rome, and returned with him to Naples, in which city he left me to pursue my studies. To the celebrated Abate Genovesi I am indebted for my knowledge of logic and metaphysics; and for geometry and medicine to P. Orlandi, a monk of Celestino. But having a restless disposition, and an ardent desire to see other countries, particularly France, I quitted Naples secretly, and commenced my travels; but, on arriving at Leghorn, the want of money obliged me to return to my native town; near which, at length, I retired to a country-house, intending seriously to devote myself to scientific pursuits. At twenty-five years of age I married Donna Teresa Muzio, a noble lady, of Gallipoli, where I fixed my residence, dividing my time between my books and other agreeable recreations.

“ Rendered more independent by the death of my father, I visited Rome, accompanied by my wife, and after remaining there a year and a half we returned to Gallipoli; but, in the course of the next year, I again left it for Rome (1761). The admiration excited in my mind by the venerable antiquities, and by the more modern erections of the “ eternal city,” drew my attention towards architecture, although I was entirely unacquainted with drawing; and after some study and consideration on the subject, I published the ‘ *Vite degli Architetti piu celebri*,’ the first edition of which appeared in Rome 1768, and met with a favourable reception from the public, notwithstanding the severity of my criticisms, and the want of elegance in my style.

“ I then translated the ‘ *Articolo del Salasso*,’ in the *Encyclopædia*, wrote a small treatise on medicine, and compiled the ‘ *Elementi di Matematiche pure, secondo Abate de la Caille*,’ as an exercise to myself in that science, which was printed at Rome, at the request of some friends. Other works succeeded, and my pen will, no doubt, be employed as long as I have the power of using it: — a *Treatise on Theatres* excited some controversy at Rome.

“ When a little further advanced in a knowledge of architecture, I wrote, though there was some temerity in the attempt, the ‘ *Elementi di Architettura Civile*,’ which went through several editions. The ‘ *Arte di vedere nelle Belle Arti*,’ is a small work, which much displeased the admirers of Buonarotti. To satisfy the wishes of a friend of high rank, the Cavalier Zulian, ambassador from Venice to the Holy See, I undertook a work, shewing the various beauties and defects of ancient and modern Rome, and published the first part, entitled, ‘ *Roma nelle Belle Arti del Disegno* ;’ but the second and third parts were suppressed, to avoid the further observations—I may say persecutions—of ignorant professors. I then turned my attention to natural history, and wrote much on that subject, but only published an ‘ *Introduzione alla Storia Naturale*,’ and a translation of the ‘ *Geografia Fisica di Spagna di Guglielmo Bowles*,’ which was published at Parma. The ‘ *Storia Astronomica Antica e Moderna del Sig. Bailly*,’ falling accidentally into my hands, I abridged it to an octavo volume. The ‘ *Encyclopédie Méthodique*’ supplied me with the means of writing a ‘ *Dizionario portatile delle Belle Arti del Disegno*,’

which was published in two volumes. The article ‘del Incisione,’ was subsequently added. At the request of my illustrious friend, the Sig. Cav. D. Nicola de Azara, I have been occupied in compiling the works of the Cav. Mengs, and have also completed a ‘Dizionario di Medicina domestica sulle traccie di Guglielmo Buchan, Medico Scozzese.’ I also intend to publish a sketch ‘Sulla Economia Pubblica;’ to the consideration of which I have devoted much attention, although the present time is not very favourable to such a subject.

“ It is not uncommon for authors to write elegant and egotistical effusions on their moral and physical character, which often excite a smile. I would willingly delineate my own; but as it has nothing in it singular or extraordinary, I find it difficult to do. Thus, I who have long studied myself, ‘know not myself,’ and yet have attempted to describe others, sometimes from their writings, which perhaps contain opinions diametrically opposite to their real sentiments. I am phlegmatic, choleric, and haughty; at the same time modest, kind, and capable of endurance; courageous, noble in my ideas, and free from prejudice, open to the reasoning of others,

and fond of novelty. I cannot boast of much penetration or reflection, yet am desirous of possessing every thing; I am industrious, compassionate, a sincere friend, and a good man; humble, without being abject; generous and easy, but severe. I hold in abhorrence every mercenary feeling. I am studious, and anxious of acquiring knowledge of whatever is most useful: my works and discourses have procured me the reputation of being learned. I know myself to be otherwise, and am a heterogeneous compound of contradictions."

In this singular and amusing sketch we have strong evidence of the success usually attendant on a steady perseverance in the pursuit of knowledge; and a proof that, although not regularly initiated in the principles of architecture in the early part of life, the subsequent industry of Milizia enabled him to become the author of many useful works on its principles and history.

He died at Rome, in March 1798, of a pulmonary complaint, brought on by a cold, to the great regret of his friends and the admirers of the fine arts.

INTRODUCTION.

BUILDING is the offspring of necessity; and no author has yet been able to give a date to its origin. When man became sensible that it was requisite to defend himself from the inclemencies of the weather, by taking shelter under the branches of trees, or in grottoes and caves, he probably soon after became desirous of more wholesome and convenient accommodation. His cabin would be constructed according to the knowledge he then possessed; his first efforts at construction naturally resulted from an ardent desire to satisfy his urgent necessities; and his buildings would be erected without much reflection, as he would drink or eat, solely to preserve life. There is a wide distance between instinct and art, and between art and science.

Cabins, sometimes conical and sometimes quadrangular, variously formed, were the only habitations for centuries. This primitive construction, which could scarcely be called building, still less the science of architecture, exists even now in some of the most enlightened countries of Europe, though gradually yielding to better taste, produced from the view of those more magnificent structures raised by the refinement of human genius.

As man's intellect expanded, he became discontented with his cottage of rude materials, and began to construct with stone; adapting the form of his dwelling to his various exigencies, and to local circumstances. Convenience was the first consideration, next solidity, and finally beauty. After numerous attempts, a long series of errors, accidents,

discoveries, and corrections, the art of building was perfected.

The rudiments of this art most probably originated in Asia and Egypt: Babylonia and Nineveh, Thebes and Memphis, with their labyrinths, pyramids, and obelisks, seem to authorise this idea: but Greece offers us still stronger evidence; there we yet see examples of the primitive Doric, in the temple of Thoriclon at Athens; that of Apollo at Delos; and the temple of Corinth: they much resemble those of Pestum, in which we discover something more than art,—a passage seems to be opened from art to science.

The science of architecture we certainly owe to the Greeks; and it is theory and practice which constitute the principal difference between science and art. The latter is a system of knowledge, reduced to positive rule, invariable, and independent of caprice or opinion. Science is the knowledge of the relation which a certain number of facts have to each other, and necessarily supposes the previous existence and discovery of these facts. This is the work of the senses only. The most active and penetrating talent is but weak compared with the consciousness of our necessities, which imperiously command our attention. But for the agreeable or painful sensations excited in us by the circumstances with which we are surrounded, we should be ignorant of the most common properties. Accident has shewn the cause of some, and the love of ease, from whence springs an instinct infinitely more perspicuous than reason itself, has made us feel their use. Thus the wants of man rendered him an artisan; he cultivated the principles of art by the force of nature, widely differing from that perfect reasoning, which can alone produce science, after a long course of years.

These observations by no means detract from the merit of the ancient inventors of our arts, nor from the glory which is due to them. Although their works were simple

and rude, they should be regarded as the most ingenious of their times ; human intellect being then in its infancy, and science yet unborn: they were all that they had the power of being. The strength and extension of talents is not so much the work of nature, as of the time and country in which accident has placed us. Had Palladio been an antediluvian, all the power of his genius would probably have been shewn in putting together some cabin or hut, but never in combining the orders and disposing the ornaments of architecture. Thus also the great Newton, who could measure the universe, and calculate the infinity of space, would perhaps have exhausted all the energies of his understanding in reckoning the number ten; had he been born among those American nations, where the very best calculators cannot exceed the number three. He who first erected the most simple hovel, although much inferior to our rudest builders, was to his contemporaries a great man, and deserving of equal eulogium with our most intelligent architects. Every art and science is, then, the offspring of necessity, and grows slowly to maturity, from the desire of improvement: it is the work of philosophy to bring it to perfection.

If the Greeks were the first imitators of architecture, that is, of the art and science of building, what path did they pursue to arrive at so noble a termination? cottages could have been their only model. It is therefore apparent, that they must have imitated these in stone, with a constant inclination to improve their beauty, convenience, and solidity.

THE ORIGIN OF ARCHITECTURE.

Trunks of trees vertically placed to support the roofs of the first habitations, were easily converted into columns, sometimes plain, at others channelled, or spirally orna-

mented, which variations we often see in nature. A base was then required to give them the necessary solidity. The capital was also equally necessary at the top of the shaft, which former gradually widening, was better calculated to receive the horizontal beam. The ornaments of these capitals, the leaves, volutes, caulicoli, and festoons, would naturally be derived from the branches left at the top of the trunks; which branches, covered with leaves and flowers, would be pressed by their load, and take various directions and forms.

The columns would be determined by various circumstances, according to the nature of the trees employed, and the weight they had to support; some slight, some heavy, and some of the medium size. Hence the three orders of architecture, the Doric, robust; the Ionic, slight; and the Corinthian, delicate.

Upon the vertical trunks was placed the roof to cover the habitation; and thus originated the entablature or upper ornament of the orders, which is composed of three parts: 1st, The architrave, that is, the principal beam, placed horizontally over the vertical supports. 2nd, Over the architrave were the small beams, placed across; this is the origin of the frieze: the heads of the beams are expressed in the Doric by the triglyphs, and their intervals by the metopes. 3d, The rafters, to place the tiles upon, with a sufficient projection to protect the building below from the rain. From this covering is formed the cornice, variously expressed either by mutules, modillions, or consoles, which are the supports of the roof, and sometimes incline or overhang, to allow of the water passing off with more ease. This cornice is occasionally plain, in the supposition that the ends of the beams are covered with a coat of plaster.

From the covering or roof of the hut overhanging, arise the fastigi, called pediments, which were made more or less acute, according to the nature of the climate.

The vertical trunks, or columns, were at first placed at such a distance from each other, that the architrave with the whole weight of the roof should be sufficiently supported: hence the intercolumniations. But these being required more spacious, in order to carry materials of greater weight and importance, two pieces of wood were fixed into the vertical beams, inclining towards each other, which pointed to the architrave, and supported part of the weight. Hence the origin of arches of various forms, and of vaultings, which in the interior of edifices are only continued arches.

For greater strength or defence, the intercolumniations were afterwards closed; leaving, however, in the apertures doors and windows, for the convenience and comfort of the inhabitants; bas-reliefs may be derived from a similar cause, as well as the columns set or encased in the walls. The spaces might sometimes be closed by boards variously disposed with beams or rude stones, horizontally placed one over the other, so that the joining should correspond alternately: from these incidental circumstances have arisen plain walls, recesses in them, and rustic work, with projections or bossages.

The better to preserve the dwellings from the damp arising from the earth, they were elevated on wood or stone; hence pedestals, plinths, or basements. As a protection also from the rain, there were fixed over the doors and windows pieces of inclined boards; which produced small cornices and pediments. Porticoes were likewise placed before edifices for the same purpose.

And whence should stairs be derived, but from the trunks regularly laid in an inclined plane? The steps might be suggested from ladders, or from the sticks put across the apertures of the first habitations, to prevent the children or domestic animals from falling or getting out. In this manner, from the structure of the hut, have arisen the orders with all their attributes; and by following the

same track, we may discover the origin and cause of every other circumstance relative to architecture.

This is most probably the simple and natural road followed by the Greeks, to reduce building to an art and science, in fact, to architecture; first to satisfy their necessities and conveniences, and finally to procure and enjoy all the pleasures of life.

OF THE ESSENTIALS OF ARCHITECTURE.

We have determined that architecture, like the rest of the fine arts, is imitative; differing only in this, that some have a positive model in nature. This model is wanting in architecture; but she has another substituted by the industry of man: viz. the construction of their first habitations. The rude cottage is a model for all we discover in civil architecture.

Although building be one of the most universal and early occupations of man, and anterior to painting and sculpture, it does not therefore follow, that architecture can boast a similar antiquity. Painting and sculpture appear more easy, not only from the facility with which colours and clay may be managed, but also from the frequency with which nature presents originals for their imitation. On the contrary, architecture, before it can be considered such, according to our definition, which for greater clearness we again call the art and science of building, must suffer much for want of a model. From the same cause it is more subject to innovation and decline. It continually requires the assistance of reason, and few subjects are more difficult to study: it is not easy to account for the restriction to which the column is confined; and yet without the due proportions, it becomes either a pole or an unmeaning mass.

Architecture, like every other fine art, is subject to the

following general rules : 1st, In all its productions there should be an agreeable relation between the parts and the whole ; which is comprehended under the name of symmetry.

2nd, Variety, which prevents an object from becoming tiresome to the spectator ; and unity, which prevents disorder and confusion, and is called eurythmy.

3rd, Convenience is necessary, then ornament, which makes a just use of symmetry and eurythmy, and of the relation which there should be between an edifice and its destiny, and between the ornaments and quality of the building, adopting those most conformable to its magnificence, elegance, or simplicity.

4th, If architecture be the daughter of necessity, even its beauties should appear to result from such. In no part of the decoration should there be any artifice discoverable ; hence, every thing extraneous is a proof of bad taste.

5th, The principal features of architecture are its orders, or, more properly, they are the essentials of building ; and are therefore considered as ornaments only when usefully placed : and all other architectural ornaments are subject to the same laws.

6th, Nothing must be introduced which has not its proper office, and is not an integral part of the fabric itself ; so that whatever is represented must appear of service.

7th, No arrangement must be made for which a good reason cannot be assigned.

8th, These reasons must be deduced from the origin and analysis of that primitive architecture, of the cottage which, as we before observed, was the origin of civil architecture. This is the directing rule of artists in their work, and of the learned in the examining of them. Every thing must be founded upon truth or its similitude. Whatever cannot really and truly exist, cannot be approved of in representation.

9th, Examples and authority, however great they may be, should have no effect on the reason.

These principles are all positive, constant, and general ; they are the absolute properties of the art, regulated by good sense, and, taken together, constitute the real and essential beauty of architecture. But if once lost sight of, architecture disappears ; it is no longer a science or an art, but becomes mannered, capricious, and absurd.

THE CHANGES THAT HAVE TAKEN PLACE IN ARCHITECTURE.

Either from an inattention to these principles, from want of care, or from their not being well understood, architecture has suffered great changes. Established in Greece at the glorious time of Pericles, four or five centuries before the vulgar æra, it continued vigorously to flourish till the time of Alexander of Macedon, in some countries of Asia, and even in Egypt. It was adopted by the Romans during the time of the republic, and was encouraged throughout the whole of their vast empire, if not with any increase of beauty, certainly with additional majesty and magnificence. It declined under Constantine into a heavy disproportioned style, improperly called *Gothic*. Under the Lungobardians and Charlemagne, it became still worse. In the tenth century it again changed, and from the excess of heaviness, assumed an equal excess of lightness ; every part was perforated and embattled : this was called the *Modern Gothic*, and, for distinction, *the Gothic*. It was considered still more beautiful when loaded with little arabesque and Moorish ornaments. It revived again in the thirteenth and fourteenth centuries under the name of modern Greek, combining the arabesque with the Greek orders, of tolerable proportions. Finally, arts and science again arose in the

fifteenth century, and Greek-Roman architecture with them; or, to speak more correctly, an admiration for them was rekindled; but between the estimation and the practice there is a wide difference. It is now three centuries since the Grecian architecture has been generally admired throughout Europe, while the Gothic has been proportionably decried. But in abandoning the one, have we followed the other? It rather appears that a new species has been adopted, equally removed from the lightness of the Gothic, or from the majestic elegance of the Greek.

The cause of these changes, and of the actual state of architecture, is in the negligence of its principles, which point out fixed rules for beauty, convenience, and solidity, the three great requisites for every kind of building. Whoever reasons justly on these principles, is secure of being correct in his taste, examination, and execution, of whatever architectural work he may undertake. Nothing is more difficult to the human understanding than logic, or in the execution than a complete building.

ON BEAUTY.

The beauty of civil architecture depends on ornament, symmetry, eurythmy, and convenience.

By ornament is understood that decoration which is continued through the whole body of the building. The principal of these are, the orders, sculptures, paintings, marbles, stuccoes, &c.

An order is composed of a column and entablature. The principal parts of the column are the base, the shaft, and the capital; those of the entablature, are the architrave, frieze, and cornice.

OF THE ORDERS.

There are but three orders, viz. the solid, the medium, and the delicate. To solidity, simplicity is the most appropriate; to the medium, elegance; and to the delicate, richness. To these styles are three corresponding orders; the Doric, simple and strong; the Ionic, elegant; and the Corinthian, slight and ornamented. In rising either above the Corinthian, or falling below the Doric, we lose all grace.

The diameter of the column, taken at the imo scapo, or immediately above the lower *listel*, with regard to its height, follows in this simple proportion:—

Doric.	Ionic.	Corinthian.
$\frac{1}{3}$	$\frac{1}{2}$	$\frac{1}{1.6}$

Each of these columns require a proportionate entablature; for the stronger support should carry the greatest weight, and the most delicate the lightest. Hence the height of the entablature, with regard to the height of the column, will be —

Doric.	Ionic.	Corinthian.
$\frac{2}{3}$	$\frac{2}{9}$	$\frac{2}{1.6}$

And the diameters of the column, with regard to the whole height of the order, is —

Doric.	Ionic.	Corinthian.
$\frac{1}{1.6}$	$\frac{1}{1.1}$	$\frac{1}{1.2}$

The general rules are, however, sometimes susceptible of alterations, according to various circumstances, which an architect will consider. The nearer the columns are to each other, the thicker they will appear; and the higher they are raised on a pedestal or basement, the greater will

be their length in effect. When exposed in open air, or on a dark ground, they will appear more slender, as the air is said to diminish their size. The greater number of channels give a greater appearance of thickness to the shaft. These, and other considerations, will enable an architect to increase or diminish the columns: but such a change must be done with moderation, and not without the most mature thought.

DORIC.

The Doric having been the earliest invented, has been consequently subject to many variations. At first it had no fixed rules, and the height of its columns was about five diameters; sometimes four. At the time of Pericles it had attained six diameters, and the Romans raised it to seven and half, and sometimes to eight, by adding a base, which was never used by the Greeks.

The base proper for this order, when one is required, is that generally called the Tuscan, which is beautiful, though simple. This masculine order does not allow of a multiplicity of mouldings, nor a trifling division of parts; nor does its capital admit of small separate members. It is beautiful and strong, and consists only of three divisions: the necking, the ovolo with its gradations, and the abacus with its cimacium; the whole gradually acquires strength and sharpness as it rises from the shaft. The contrary should be the case with the base, which only admit of three or four principal divisions, otherwise they would diminish into littleness,—an effect at all times contrary to good taste. The most strength should be given to the lower member, which must have the greatest height; that above requires less, and the upper, which is the lightest, still less.

The architrave must not be divided into a number of

faces, but only crowned by a small band. The frieze is generally expressed by metopes and triglyphs; the latter channelled for the carrying off the water, which is supposed to run from the corona to the mutules and triglyphs, at the bottom of which it terminates in drops: hence these drops ought not to be represented by cones, or truncated pyramids, but by guttæ.

Architects have imposed on themselves the rigorous law of making the metopes perfectly square, and placing the triglyphs over the centre of the columns. These two restrictions, being sometimes difficult of accomplishment, have produced a variety of absurdities, which may readily be avoided by those who study the matter.

To use dentels in the Doric cornice, as practised by Vignola, after the example of several ancient edifices, is manifestly contrary to good sense; not only because they are an ornament too delicate for this order, but also because they cannot be placed under the mutules.

If the dentels represent the ends of the rafters, it must be inconsistent to introduce mutules above them, which denote the same thing.

IONIC.

The Ionic column was originally of eight diameters, but the Romans increased it to nine.

The base assigned to it by Vitruvius is practised by some moderns, and is the reverse of what every base ought to be, the members of which should diminish in strength and projection, in proportion as they approach the shaft of the column. Here it is precisely the contrary, the thickest members are placed on the most weak. The proper base for this order is the attic, which is more elegant than the Doric, and less rich than the Corinthian. The Greeks used no plinth.

Its ancient capital is generally formed of two parallel bolsters, or pillows, each tied in the centre by a band, forming two faces, ornamented by volutes. This capital is inconvenient on account of the angular columns towards the flank presenting a different aspect to those in front. To avoid this, the ancients used in the angular columns small pillows, not parallel, united at the internal angle, and at the exterior one a double volute. Another ancient capital has a volute disjoined at each of the four angles, so that it is seen alike on all sides, as in the temple of Concord. This has been improved by Scamozzi, who left these volutes open, and elegantly ornamented them with a fillet. Finally, there is another Ionic capital, attributed to Michael Angelo, consisting of two bolsters, like bells, with two faces, an abacus heavily carved, two festoons suspended to the eyes of the volutes, and four heads. The invention is not one of his happiest efforts. The architrave has a better effect with two faces than three, reserving the third for the Corinthian, the more readily to shew the gradations of the order. For this reason the frieze should be plain, or with very little ornament.

In the cornice, the lightest pieces of timber are the rafters, which express the dentels. These should not be under the corona, as always practised, but above, where the rafters really are. Scamozzi alone has omitted these.

CORINTHIAN.

In the Corinthian order it was the object of the Greeks to display the greatest delicacy and the utmost magnificence. The height of the column was originally eight diameters and a quarter, as in the tower of Cyrrhestes at Athens, where, however, there is no base: it was subsequently fixed at ten diameters.

The base used in this order has the disagreeable repetition of the double astragal immediately between the two scotias. An attic augmented by an astragal placed above each torus, and a cavetto, with two listels above it, is much preferable.

The Corinthian capital has a most exquisite grace and elegance. It consists of four parts, which increase in size as they rise; these are the small leaves, the larger, the caulicoli, and the abacus. In each space, between the leaves, is represented the basket, in allusion to the invention of Callimachus.

The entablature differs little from that of the Ionic, except in some of the smaller details. The architrave has three fascies, each surmounted by its band. The frieze is plain, but allows of ornament when required. The cornice is composed of pieces of wood larger than the rafter; that is, they represent the head of the beams, and are called modillions: but, if the Corinthian is more delicate than the Ionic, it is necessary that the parts should be more delicately expressed. The modillions, therefore, would be more consonant to Ionic, and the dentels to the Corinthian, provided they were properly placed, that is, above the corona. It would, perhaps, be better to suppress them, and apply to this cornice elegant carved modillions, and to the Ionic large and plain ones.

If the channelling is for ornament, they should be reserved for the Corinthian shaft. They are not proper in the interior of edifices where the rain cannot enter, and where it cannot consequently be imagined that these channels are caused by the course of the water.

Fluted columns should be used where it is required to make them appear larger than they really are; as the eye ranging round these flutes, and resting on a greater surface, the effect of increased size will be produced. Flutes are disagreeable in marble columns of various colours; if spiral, they are insufferable, because contrary

to nature; nor should metal be ever introduced into the flutes of coloured marble columns. The leaves, also, that entwine columns should be managed with parsimony and grace, in order that the diameter should not be altered.

Plain round columns produce the best effect; twisted or spiral ones, as in the tribune of the Vatican, are as unsightly as crooked legs.

Columns should be diminished from a third of their height towards the top, this being the case with trees; but to make them swell in the middle is the effect of ignorance. The diminution must be in proportion to the size of the column; thus, it should be a sixth in the Corinthian, a seventh in the Ionic, and an eighth in the Doric.

Each of the above orders should preserve their particular characters. Each may be altered as occasion may require, but no mixture must be allowed. A Doric with the Corinthian cornice, a Corinthian with the Doric entablature, are as visible deformities as a soldier with a coif, or a child with a grenadier's cap. Each order is susceptible of improvement in its proportions, its parts, form, distribution of the members, and the lighter ornaments; but a new order, although so frequently attempted, never can be formed, because the three already named are sufficient for any character of building; and whatever opinion some may hold on the subject, none but the above-named alterations can be effected.

TUSCAN AND COMPOSITE.

The order called Tuscan, and the other called Composite, which have induced the moderns to reckon five orders in architecture, are, in fact, any thing but distinct orders. The Tuscan is but a more simple Doric, and the Composite does not differ much from the Corinthian.

OF PERSIANS AND CARYATIDES.

Still less can the above deformities be designated orders, though by some so distinguished. Some Persians and female slaves of Caria being taken prisoners, were by the Greeks most absurdly represented in their buildings: to these succeeded heroes, gods, and satyrs, who were to support a whole fabric on their heads, the half of their bodies being set into the wall, the rest projecting, and terminating in fish and leaves.

ATTIC.

The attic is a low wall at the top of buildings, to conceal the roof; or a species of plinth, to separate orders when placed over each other, or to shew the springing of the vault; and therefore can only admit of small orders as decorations.

RUSTIC.

The rustic is only an assemblage of rough rude stones, called bugne or bozze, which was suitable to some walls, but by no means constitute an order; much less should they ever encumber columns, particularly the Ionic, as is sometimes most absurdly practised.

PEDESTALS.

Pedestals are not integral parts of the orders, but the use of them must be tolerated as circumstances may require; as where the soil cannot be reduced to one level, they are remedies; and it is always to be regretted when

there is a necessity for them. They should be continued as a simple basement, and kept ^{as} low as possible, otherwise a variety of ill effects are produced. 1st, They deprive the column of its noble and majestic air. 2d, The angles of their cornice are liable to fracture, if not out of reach. 3d, Having a projection, they cause the rain to rebound, which is injurious to the bases of the columns. 4th, Resting against the wall, they form a mass of unequal bases, extremely discordant. 5th, They lessen the lower intercolumniation, where the greatest space is required. To place them one over the other, like piles of wood, as is generally practised, is an extravagance.

PILASTERS.

Pilasters are square columns, and in consequence, require the characteristic of a column, bases, diminution, capital, &c. They are, however, not so beautiful as columns, and are consequently not so much used. They are never isolated; they are requisite at the angles of the walls, but rarely look well in the façades. Those placed at the back, and at a little distance from the column, are evidently useless. It is an error to make them mere veneers, and put them in clusters at the angles.

INTERCOLUMNIATIONS.

In order to proportion the spaces between the columns, regard must be had to solidity, convenience, and beauty; so that the spaces should never be so great as to destroy the real or apparent solidity; nor so narrow as to render them useless. It is evident, that if large columns are placed too near together they appear thicker, and if delicate ones are placed too far distant, they have the ap-

pearance of greater delicacy; thus the Corinthian intercolumniation may be two diameters, the Ionic two and a half, and the Doric three; but a little more or less is allowable, as may be required.

In every species of edifice, an equality in the intercolumniation pleases, though the moderns appear but little sensible of this. The centre one may certainly be a trifle wider than the rest. The columns at the angles should be a little thicker, not only on account of greater solidity being required there, but also to produce greater beauty, because being surrounded by the air, they appear more slender.

When columns are near, or set into the walls, the intercolumniations should be so arranged that the jambs of the doors, windows, and niches, should be close to the plinth of the columns.

From the rule here laid down for the intercolumniations, we may conclude that the custom so frequently adopted by the moderns of coupling the columns, is by no means commendable, unless in a case of necessity. Their real use is in a building where the thickness of the wall is too great to be expressed by a single column.

ARCHES

Are not so magnificent or beautiful as simple colonnades; but they are more solid, less expensive, and more convenient for entrances and all large openings.

To spring arches over columns is a barbarism, and an offence against all solidity, real or apparent. To spring them from an entablature, and to place at the sides of the piers columns to support the before-mentioned entablature level, is an elegant arrangement, when the lesser intercolumniation is according to prescribed rule. The most natural is to place them over simple piers.

The height of the openings should be about double their

width : in the Doric it may be a little less than double ; in the Ionic exactly double, and in the Corinthian a little more.

The width of the pier should not be much more than half, nor less than two-fifths of the width of the opening. Their thickness should not be less than a fourth, nor more than a third of the width of the arch. Columns are sometimes united to the piers, though they are seldom required, and never produce a good effect.

The beauty of an arcade depends, 1st, on the form of the opening ; 2d, on the application of the orders ; 3d, on the exactness of the parts of which it is comprised, and the size of its piers ; 4th, on the imposts ; 5th, on the archivolt ; 6th, on the key-stone.

1st, The best form is the semicircular : the elliptical, the pointed, and the Gothic, are less agreeable to the eye, but are stronger, according to the height given to them. Their relations must correspond with the character of the order to which they are adapted.

2d, The orders should predominate over every other part, without appearing either colossal or dwarfish ; some little plinth may be allowed, to prevent their being injured. The columns should be isolated, or not more than half set in the walls. The intercolumniation should comprise the width of the arch and the wings.

3d, The wings are portions of the piers on each side of the column or pilaster : their width should be according to the orders, and their best proportion is the semi-diameter of the column.

4th, The imposts should never cut the column. They should appear strong in proportion to the size of the arches ; their office being to receive the fall of the arch, and to unite the two curves so that they should not appear to thrust out the piers.

5th, The archivolt, or front of the arch, must unite with the impost, but should project less ; nor should

the lower ornament of the architrave extend beyond it. Its ornaments require a distinct character, and should bear relation to the order.

6th, If the arches are large, the key-stone must not be omitted, and may be represented as a corbel supporting the architrave, which, from its great length, requires something in the centre. They are useless in small arches, and where there are no orders. The key-stone, from its situation, being very visible, should have an agreeable form, solidity, and ornaments analogous to the order; scrolls are too trifling, and masked heads very improper. Its relation must be like those of the wedges which form the arch; these may be thirteen in the Doric, fourteen in the Ionic, and fifteen in the Corinthian. But when the wedges are not used, as in delicate orders, the inferior width of the key-stone may be equal to that of the archivolt, and its height about a diameter: its projection must never exceed that of the architrave.

THE UPPER POSITION OF THE ORDERS.

The upper position of the orders produces great inconvenience, if the cornice of the lower orders is not suppressed. The cornice is the last part of an edifice. It should therefore only be placed at the top, and to the last order, where it performs its office with propriety, which is to protect the building below from rain.

Solidity requires that the strongest order should be underneath. The same order must never be repeated, nor the intermediate order omitted, as the Corinthian over the Doric; this would produce too great height in the upper column, or too wide an intercolumniation. In placing the columns one over the other, their bases should plumb exactly perpendicularly. There should not be more pilasters or columns put above than there are below, otherwise the

upper will be placed against all principle: the lower diameter of the upper column should be equal to the upper diameter of the lower column, as if these columns were one long tree cut horizontally into several trunks. If the columns are diminished on account of their delicacy, the upper intercolumniation should be proportioned thereto. A continued plinth is only allowable between the orders, but no pedestals.

In all the ornaments of which we have hitherto spoken, and in all others used in buildings, we must never lose sight of the two following rules :—

1st, All the profiles of the minor parts of the vaults, as well as archivolts, the door, windows, niches, &c. should be in their whole, and in each of their principal members, always smaller than those of the orders, entablatures, or other ornaments, which form the principal features in the same composition.

2d, The profiles at the extremities, and their members, should be continued in one uninterrupted line throughout the edifice.

SYMMETRY.

Symmetry consists in that proportion which the parts should have towards each other, and to the whole. For example, the height of a door should be proportioned to its width, and these to the size of the whole edifice. This it is that produces symmetry, which it appears, therefore, is the same as proportion.

Proportion is the most beautiful and the principal feature in architecture. A building devoid of all ornament, and without any other merit than a justness of proportion, will always produce a beautiful effect, and be sufficient in itself. On the contrary, the richest edifice wanting of proportion can never be beautiful.

PROPORTIONS.

The rules of proportion depend absolutely on that branch of optics called perspective; that is, on the manner in which we see objects at various distances, and in various situations. An architectural object appears beautiful to us, when its principal parts are so united, that the eye shall be gradually led from its greatest to its least considerable part, according to the various degrees of importance that these parts possess in the composition, in order that their various images should be impressed on the mind before it is affected by any of the subaltern members. These again should be so treated as not to be absorbed by the former, but should be equally capable of exciting distinct ideas suitable to the purpose for which they may be intended.

An edifice then, is well proportioned, if the eye easily comprehends all its parts, if the impressions on this organ are not too diffuse, but all concur to produce an harmonious whole. When an edifice is too wide with regard to its height, it will impress the sight as being larger than it really is. The width only will be considered, and it will be impossible to take the whole of the edifice at one glance; an unharmonious impression will be the result, and the object will be rendered disagreeable.

But—What numbers constitute this agreement in the proportions of architecture? This is a great question, and has been such from time immemorial.

It has been demonstrated by the best architects, that the proportions of architecture do not consist in any of the four famous proportions, geometrical, arithmetical, harmonic and counter-harmonic, nor in exactness of commensurability. Experience alone has guided us in the discovery of relations most agreeable to the eye. The inventors of art were ingenious, as Vitruvius relates, in

applying the male and female proportions to the orders, or, as appears more probable, those of various trees; and thus, by repeated attempts, they have been enabled to fix those relations of length, breadth, and height, which are agreeable to the eye, without being guided by any of the before-mentioned proportions. They are therefore founded on nature, and on the wants which we feel of solidity and convenience. If nature had produced all her largest trees as delicate as the stalks of grain, and at the same time strong enough to sustain the greatest weights, the proportions of our architectural orders would have been on the model of these delicate stalks. Whatever is beautiful in art is deduced from the productions of nature, and applied to our wants and convenience. Thus the doors, windows, and arches, are in height double their width, because our convenience requires that this should be the case to render easy our egress and ingress. The necessities, wants, and convenience of men, are the real origin of these proportions, and custom has confirmed them, and rendered them beautiful.

Hence has arisen the different national styles of architecture. The Egyptians, whose country abounded more in marble than in wood, delighted in heavy masses. Other people, of smaller and more delicate stature, living amidst tender plants, have preferred a low and light style. The Grecian was analogous to the temperature of the climate, equally abounding in marble and vegetables, and with men of temperate habits and active talents. The Romans, in a less benign climate, and more abounding in trees than in marble, in copying the Grecian architecture made it more lofty and delicate, without however improving it. To what a much greater degree of delicacy would the people of the north carry it, almost entirely deprived of stone, and living amidst woods and snows. And the Moorish, which is composed of pierced and filligree

work, was the delight of those barbarous nations of the sun.

Notwithstanding these national peculiarities, there is a taste common to all, which equally affects the mind in all countries. If, for example, width predominates over height in an edifice, we are struck with an idea of majesty and strength; if height predominates, we receive the impression of delicacy and elegance: these are points which please us. But an excess of width degenerates into heaviness, and of height into meagreness: these displease. Perfect proportion, then, consists in a medium between these two extremes.

To fix this medium is the province of architecture, which has no other foundation than experience in that branch of optics which determines our manner of seeing conveniently and distinctly objects in various situations.

Three things concur in determining the distance from which we see an object:—1st, The quantity of light contained in the object itself. 2d, The gradation of light between neighbouring and intermediate objects seen at the same time. 3d, The rise of the angle which the object forms with the eye.

1st, The more luminous, or the more powerful in colour an object is, the nearer and smaller it appears. The architect, therefore, will have regard not only to the situation of his edifice, whether it will be more or less lighted, but also to the different colours of the materials. If the columns and ornaments are of white marble in a building of dark brick, they should be larger than if of coloured marble, because gilding, white stuccoes, and strong light, lessen the largest things.

On the contrary, objects but weakly lighted appear further distant and larger on account of that darkness and weakness of colour; therefore, buildings by moonlight

appear larger and further distant. Thus architects, in employing orders to be seen from a distance, should express the buildings in white materials, very large, and with much strength, in order that the just proportions may be seen.

2d, The more distinct the parts of an object are seen, the nearer they appear; and, on the contrary, they will appear more distant, in proportion as their parts are more confused. How absurd, then, for architects to lose their time in drawing those minute ornaments, which look so well in their designs, but so ill in our buildings. It is not on paper, nor in little models, that those things are to be considered, but on buildings which will be looked at from their just point of view.

An object appears more distant and larger when several intermediate objects are between that and the spectator; and in proportion as these are more illuminated, the larger and more distant will the principal one be, especially if it be darker than the former. A walk, therefore, a portico, a temple, will appear larger, when surrounded by a number of trees or isolated columns. If then, an architect wishes to give an air of great vastness to a particular spot, or to his principal edifice, he will place intermediate objects around it, and keep the edifice itself as dark as possible.

3d, The most general means which we have of judging of the distance and size of objects, is the optical or visual angle formed by the optical rays, which are drawn from the extremity of an object to the centre of our eye. The distance and size of an object, therefore, is in an inverse ratio to the size of the visual angle. For instance, experience demonstrates to us that a man seen at the distance of four or eight steps appears of the same size. Our feeling, then, contradicts the mechanism of the organs. Whence arises this contradiction?

We judge of size and distance not by the power of the

optical angle, but by that of experience, acquired by touching and measuring. It also teaches us, that if an object is too distant, we see it small and confusedly. Now the same power will enable us to decide, that at whatever distance we see an object, its size is in fact the same. If by any circumstances we have no idea of the distance or size, we shall then be obliged to judge of objects by the optical angle, and by the image which it impresses on our eye. Suppose, from the top of a tower, we discover an object at a distance too great to distinguish what it is, and apparently not more than two feet high, we afterwards find it to be a man, and presently that he is of the ordinary stature. Whence arises such a difference of opinions? While the object was unknown, we saw it only through the visual angle, and no experience can induce us to doubt the traces made on the retina; but the moment we discover it to be a man, the connexion which experience has formed in the mind between the idea of a man and of the height of five or six feet, obliges us without reflection instantly to see one of that height which in fact he is.

Whenever, then, objects are used, the size of which is unknown to the generality of spectators, as orders, vases, trophies, their dimensions should be regulated by the rules of optics, in order that they should appear, from the point of view at which they are placed, of the size they may be required; but when familiar objects are used, as statues, they should be as nearly as possible of their natural size, in order that they should appear as they really are.

If the same objects are all on one plane, above the eye, the farthest will appear the lowest. Therefore, in entablatures it is necessary to make the members at the back incline forwards. In narrow situations, to be looked at from below, the level parts should be increased in size, as in the corona, and less projection given to the other members.

The upper parts of objects at a certain height appear to incline forwards; so that pediments and statues should be receded in the same proportions, to make them appear upright.

Experience teaches us, that if a vertical object makes an angle of forty-five degrees, we can look at it from below with perfect convenience; if the angle is increased to seventy, the object becomes inconvenient for the spectator to look at; and if greater than that, the body must be placed in too uneasy a position to derive any pleasure. An angle of twenty degrees is as inconvenient as one of seventy, and both are equally removed from forty-five, which is the medium angle. Therefore, any part of architecture susceptible of height, will appear too low if it makes an angle of less than twenty degrees, and too high if more than seventy. These inconvenient extremes should always be avoided.

The point of distance and sight varies according to the form of an edifice. If its height be equal to its length, the point of view may be fixed on the zenith of an equilateral triangle, which shall have for its base the width of the edifice; but where the height is not equal to the length, the point of view should be at the zenith of an isosceles triangle, formed of the base and height of the edifice.

Others determine this point of sight to be half the height of the edifice, and the length of the façade. Thus, supposing the height to be forty, and the length eighty, the point of sight will be sixty feet distant from the building.

GENERAL PROPORTIONS OF FACADES.

Façades have but two dimensions, height and length: 1st, If the height is equal to the length the form is

square, which suits the façades of churches, gates of cities, triumphal arches, and pavilions. 2d, A length greater than the height is suitable to houses, porticoes, &c. For the former, the length should not exceed the third of the height; for the latter, not more than a fifth; if more is required, it is better to break it by pavilions of various forms, which in large façades produce a good effect. 3d, Height exceeding length is suitable to cupolas, pyramids, campaniles, and towers. For cupolas the just height is between a half and a third of the length; for the other edifices, between a fourth and a ninth. These proportions are required by the eye.

The elevation of the façade should be proportioned to the size of the space from whence it is to be seen. If the space is very vast, the façade must be raised to a sufficient height, that, when viewed from the centre of the space, it should be seen under an angle of forty-five degrees.

It is necessary also to have some regard to the situation of the edifice, whether it be elevated, isolated, light, surrounded by other lofty objects, or low. These circumstances must always make an alteration in the prescribed relations; and in these alterations the architect will shew his ability, so as to render the work agreeable.

PROPORTIONS OF THE PARTS WITH THE WHOLE IN FACADES.

Façades have either some architectural order, or are destitute of them.

1st, The exterior decorations should be divided into large parts; there are therefore but few edifices which can allow of more than two orders of architecture. Ordinary edifices should have only one, raised on a plinth as a surbase. This plinth may be one or two diameters high; but the less it is, the more noble will the order appear.

One order never can contain many stories, because each story having its floor and architraves, the intermediate ones must cut the shaft of the order. If every story had its order, a house of three or four would have as many orders, whilst palaces scarcely ever have more than two. A multiplicity of orders, one over the other, produces a smallness of parts, contrary to the majesty required. Their diameter must be determined by the height of the story in which they are used, so that the columns be proportioned to the whole.

2d, In the façades devoid of orders, a just relation of the parts with the whole is required. To regulate this relation, it is easy to suppose an order to each story; and if they are numerous, every thing will be small. It is better to suppose one single order placed on a plinth, and then so to arrange the stories, that they decrease in height as they rise. In houses of two stories, the whole height may be divided into five parts, giving three to the first and two to the second; or into twelve, seven to the first and five to the second. If the edifice has three stories, it may be divided into nine, four to the first, three to the second, and two to the third; or into fifteen, and then divide into six, five, and four.

GENERAL PROPORTIONS IN THE INTERIOR OF EDIFICES.

The interior of edifices may be divided into three parts; 1st, some with three equal dimensions; 2d, others of two equal dimensions; 3d, others of three unequal dimensions.

1st, Of the first kind are all the varieties of apartments; as halls, rooms, anterooms, closets, &c. To the cubical form of these may be substituted the round, the polygon,

the mixed, &c.; and then the diameter of the square circumscribed by the plane of these figures determines their height.

2d, Those of two equal dimensions are of two kinds, rectangular in the height or length.

The rectangle in height is suitable to cupolas, saloons, vestibules, and staircases. They must not be more than triple their width. If higher, their soffit will be seen under an angle of more than seventy degrees, and consequently in an inconvenient manner.

The rectangle in length is suitable to halls and galleries. For halls, the best proportion is double the length, or double the width; for galleries, a fourth or fifth.

3d, Inequality in the three divisions belongs to churches, porticoes, and elsewhere. In these, then, some liberty may be taken.

If an order is to be used in a well-proportioned edifice, the diameter must be proportioned to the capacity of the place; the larger this is, the greater must be the diameter. The height is divided into nine parts for the Doric, ten for the Ionic, and eleven for the Corinthian. One of these parts must be the diameter of the order, which, if the general proportions are good, will be proportioned to the place.

In places that are vaulted, from the total height, the semi-diameter of the vault must be allowed, and the rest given to the orders. In the interiors, where two orders are used over each other, the semi-diameter of the vault must be subtracted from the height, and the rest divided into two equal parts. But cornices must always be avoided in the interior; there being no necessity for protection against rain.

EURYTHMIA.

The uniform correspondence of similar parts; as that each side shall be similarly disposed, and produce a generally elegant effect; thus the gate must be in the centre of the façade, with an equal number of windows on each side, of the same proportions, form, and decorations. This constitutes eurythmia.

This quality generally pleases, because it enables us to perceive at once the whole of an object: but variety also pleases us, and the one is not at variance with the other. Wherever we see a whole at one glance, eurythmia is necessary and elegant, as in a parterre, a temple, or a façade. But where objects are to be seen successively, it is insipid. In this case variety is required, as in the distribution of houses, a palace, &c. Whoever is unacquainted with designing will use eurythmia improperly, because it looks remarkably well in a drawing where every thing is seen at once.

We also receive pleasure when, on the first coup-d'œil, an object forms an harmonious and perfect whole. Method, unity, simplicity, variety, contrast, and progression, may all be considered to form part of the quality now under consideration.

Method or order requires that every thing presented to the eye should be so placed as to be easily distinguished and imprinted on the memory, that the spectator may be enabled to judge of what is yet to be seen. The palace of the Vatican is continued disorder, on whichever side we turn; and disorder is always offensive.

Unity requires that all the parts of an edifice, and all its ornaments, should have a reference to the principal object, forming together a unique whole. To place an apartment over the entablature of an edifice, is the same

as placing two houses over each other. To use different orders in the same story, is to destroy all unity.

Simplicity is not inimical to richness, but to a superabundance of it. An edifice may be simple, however numerous the ornaments, when these are disposed with economy :—such is the Pantheon.

Without variety, every thing is insipid ; therefore, in the various stories of a façade, neither the orders nor decorations of the windows are to be repeated. But variety should not occasion confusion ; therefore the ornaments are not changed at every window ; and the columns of a portico must not differ from each other. Gothic architecture, from being too much loaded with small and different ornaments, destroys the beauty of variety. A few ornaments, well managed, will produce variety in every production of architecture,—as seven notes are made to produce an infinity of sounds.

Contrast consists principally in the opposition of the heights, projections, and forms, that constitute an edifice, and in the opposition of the plain with the ornamental parts, situation, and colour. Every façade of any great extent should be interrupted by unequal heights, cupolas, pavilions, towers, in the centre and at the angles, according to the quality of the building. This is an excellence peculiar to the Gothic.

In every edifice there should be a progressive increase of beauty. If the auxiliaries are beautiful, the principal façade should be still more so. The portico, vestibule, and court, superior to that ; and the staircase and interior arrangements surpass even these.

CONVENIENCE.

Convenience in architecture may be defined, “ as the use of the reason in the choice and application of all that

is requisite to render buildings perfect ; that is beautiful, convenient, and strong, according to the various uses for which they may be intended."

Convenience or fitness, which rules every thing, should itself be governed by nature and custom. Nature teaches an architect, that if he intends to study fitness, he must select the most beautiful of her productions, and the most consistent for his purpose ; and dispose them elegantly in his edifices. This is nature in all her beauty ; and, as she is always the same, the links which bind her to convenience, are invariable and universal. Custom may vary according to the opinions of nations who differ in their laws, habits, climates, wants, &c. Hence the Christian churches are different from the Chinese pagoda. But though they differ, both are founded in some measure on nature and reason. And we must never be in opposition to either, though it is not unfrequently the case ; but such abuses ought to be noticed and abolished.

USE OF THE ORDERS TO THE EXTERIOR.

It appears that the orders are principally intended for the exterior of buildings, and that one only is proper : the origin and use of the entablature evince this.

In the same story, one order only can be used of the same size ; otherwise a discordance in the bases and capitals will arise—an opposition of large and small ; hence, that will appear gigantic, this diminutive.

Columns should never be run one into the other :—into this great error Palladio himself has fallen in the Chiericati palace.

Great caution is required in using the orders in plans that are not rectangular, to prevent their plinths, abaci, and entablatures, from looking crooked. This caution

must be doubled, where the plan is curvilinear and concentric; and every thing must be placed according to the rays that proceed from a centre, in which cases the plinths and abacus cannot be square. The point that requires most attention in concentric plans, — as in the piazza Vaticana, where there are four files of columns, — is the judicious arrangement of those columns, so that if the intercolumniations of the interior circumference be just, those of the exterior shall not be too wide.

In curvilinear plans, arches must never be used, otherwise the archivolt will appear useless. The columns must so approximate, that the convex curve of the entablature should appear sufficiently supported on the exterior. The small portico by Bernini, at the Noviziata in Rome, seems to threaten a fall. Finally; in curved plans, several files of columns are not proper, because when looked at from any other point than the centre, they appear in disorder, as in the piazza Vaticana.

The most noble use to which an architect can apply columns, is in an isolated form for porticoes and peristyles: a continued variety of arrangements of different dimensions are produced, as the spectator changes his position; an astonishing grandeur is acquired, and an agreeable relation of divisions.

USE OF THE ORDERS IN THE INTERIOR OF EDIFICES.

If the orders are required in the interior of edifices, it is necessary to use them without a cornice, which indicates a method to carry off the rain. Moreover, the projection of the cornice diminishes the light, which in churches proceeds from above.

In adopting the Doric internally, the ornaments of the

triglyphs and drops must be suppressed, as inconsistent where rain does not fall.

All the profiles must be more delicate than when external; and, to prevent confusion, the plinths to the bases should be expunged.

The exterior must have the same order as the interior, because the latter must be announced by the former; and an exterior story cannot be of a different character from that within.

The orders are not suitable for an inclined plane, as staircases, because the architrave cannot be flat on the capital, or placed horizontally. The same deformity occurs in the plinth of the bases.

BASEMENT

Is a mass of walls, or a continued plinth on which edifices are raised from the ground to protect them from the damp, and to render them level when the soil is uneven, and at the same time to give an air of magnificence. But to produce this effect, it must not be too high, nor ornamented with mouldings, nor cut by doors, which would destroy the idea of that massiveness requisite for the base of a building. Doors should be placed above, with a landing projecting into the street. There may also be windows to light the parts below, which may be cut in the mass without injuring it.

There is another species of basement, in which the whole ground floor of an edifice may be so arranged as to erect an order on it, as a decoration to the principal story. This may be rusticated, and its height must not be greater than that of the order, nor less than the half.

PEDIMENTS.

If the pediment is derived from the inclined roofs of the primitive cottages, it can be no other than the upper finishing of the whole building. Pediment cannot be placed above pediment, nor in the interior of buildings. Their form should be triangular, and not open at top.

Curvilinear or polygonal buildings do not admit of pediments, provided the polygon be not large, or one of its larger sides forming a façade; nor are they placed in edifices covered with a cupola, or on terraces enclosed by balustrades.

The true place for a pediment is in the width of a building, because the span of the roof is represented by it. This may be done in a contrary sense, as in the portico of the Pantheon, where it is not according to the width, but the length; and it looks well, because this portico makes a part of the temple, and in a certain manner forms its width.

Vitruvius observes, that the ancients never used modillions nor dentels in the horizontal cornice of their pediments, but only the simple corona; because in that situation there are neither rafters nor beams: nor were there any used on the inclined sides of the pediment.

The cornices of a pediment require to be differently treated, if we would have them shew their real use. A glance at our buildings will shew us how much correction is required, and how improperly pediments are used.

The best proportion for a pediment is, for its height to be between a fourth and fifth of the base. The height of the tympanum, between a sixth and ninth of the same.

The tympanum, which must always be in a line with the face of the frieze, may be adorned with sculptures, if it be large, but if small, should remain perfectly plain.

Over the three angles of the pediment rise three pedes-

tals or acroterii, to support statues or other ornaments ; sometimes eagles.

In certain buildings, as in churches of several naves, where the centre part rises above the lateral ones, a complete roof is placed over the centre, and a half one to each flank. In such cases, a pediment in the middle, and under this, on each side, a half one, indicating the lower naves, is a Palladian taste, and produces an elegant effect.

BALUSTRADES.

When balustrades are used for a separation, as in chapels, fountains, &c., their height should be relative to that of the elbow of a man, and may be fixed at about three feet. They must be so placed, that the shaft of the column should not be injured, nor the horizontal line broken.

When used for protection and safety, their height must be regulated by the order, and must not exceed four-fifths, nor be less than two-thirds of the height of the entablature over which they are placed.

They must correspond with the character of the edifice in which they are used. Those of double swell are lightest, but the least natural. Those with small bands are bad ; and still worse are they when larger at top than at bottom. The more simple they are the better. Their intervals may be between the half and third of the diameter. Between every sixth or tenth balustrade should be a pedestal or dado, corresponding with the column or inferior pilaster.

The course of the bases or of the rail must not be interrupted, nor project too much.

Statues, vases, and other ornaments over the dados or pilasters, should be as high as the balustrades, or two-thirds.

In inclined planes, balustrades may be fantastically used,

interlaced with irregular or trifling masses, in the taste of Borromini at the Sapienza of Rome. The Borrominesco may be sometimes used with success. Balustrades are not proper over an entablature, which is the termination of a building. If a balustrade is placed above, the building must finish with a terrace, and not with an entablature.

To terminate the pediments of churches with balustrades, is one of those absurdities which speaks ignorance in the architect.

NICHES AND STATUES.

Although niches may be natural, and advantageous to the appearance of a statue, they undoubtedly take much from the pleasure which the spectator would receive from observing every part of the figure.

Of whatever species niches may be, whether arched, rectangular, or mixed, they must have the same relations as the doors and windows; and if placed between these, their dimensions and decorations must be the same, in order that one straight line may run throughout the whole.

The size of the statue depends on that of the niches. In those that are arched, the head of the statue must never be above the impost: in the rectangular, it must be distant from the soffit of the niche about half the head. There must also be the same space between the statue and each side of the niche. When niches are too large, with respect to statues, a plinth may be placed under them.

The depth of niches should be half their width, in order that the statues should stand entirely within; otherwise, when looked at from the flank, they will resemble fragments attached to the wall.

The backs of niches should be devoid of ornament, or the statue will be deprived of much of its effect.

Niches rising from the pavement are preferable to those which are elevated; and when there are several, one above another, the intervals should be at least equal to their height.

SCULPTURES.

The sculptures of the orders should be conformable to the qualities and conditions of buildings. How foolish and indecorous would it be to place heads of bulls and pateræ in our churches! The decorative parts of every edifice should accord with its respective character, and every figure be proper for the situation in which it is placed. What then can be more inconsistent than lion's heads in cornices, for the purpose of carrying off the water?

In the various kinds of sculpture applicable to edifices, we must never lose sight of the three following principles: 1st, Parsimony; all the members of an order should not be sculptured; there must never be two carved alike; and intervals are always required. 2d, Intention, as every member or moulding must express its use, or signify a purpose. 3d, Fitness, both with relation to the subject represented, as well as to the character of the order and of the edifice: the ornaments most applicable to mouldings, are derived from leaves, flowers, fruits, and some animals, selected with judgment, which must never be applied to rectilinear members; they must also be regularly disposed, and have a particular correspondence with each other.

The most conspicuous parts should be ornamented, but in white marble or stuccoes, in order that they may be seen distinctly. The veins and colours of marble always create confusion, destroy the contours, and produce an inequality of light. Ornaments of marble should also be in bas-relief; as sculpture, however it may enrich a building, destroys its grandeur.

If architecture requires the assistance of statuary, the

figures must not recline over the archivolt, or the sides of the pediment, nor over the acroterii and balustrades. If the statues represent men, they should not be placed in situations where men could never stand without being in momentary fear for their lives. The most consistent situation is that in which they would place themselves, which is in the intercolumniations, where there are neither doors nor windows; and in order to shew them to advantage, and avoid injuries, they should be raised on a simple plinth, not exceeding the fourth of the height of the statue. It is not improbable that a man should stand on a rock or piece of stone, to make himself more conspicuous, or to procure a better view. But it is very improbable, that a man on horseback should gallop on a pedestal, within a portico, or up a flight of steps. We certainly require some better methods in the placing of equestrian statues. There is not much more consistency in the system of making statues stand on columns.

Architecture seldom requires statues of more than the ordinary height, or a very little more. Those less than nature, should be confined to cabinets; and those greater, for open spaces, squares, and large streets.

Statues should also be analogous to the characters of the orders; if the Doric requires them, a grave style; for the Corinthian, they must be delicate and slight. But whatever their species, they must be instructive, with clear inscriptions; and if raised to illustrious men, clothed according to the prevailing custom of the country.

PAINTING.

If the architect knows how to regulate his work, the painter, by means of his art, will be enabled to make some places appear larger, correct others of their unavoidable deformities, and display a general richness throughout.

In adopting perspective, he will never represent those objects which only please in one point of view, and offend in all others. If, for example, a soffit is painted with the several orders of architecture, and the eye is removed in the slightest degree from the point of sight, all is in confusion and ruin.

And why paint soffits in imitation of vaulting, and the little cupola on domes? thus representing things which cannot be so placed; and even were they consistent, who can look at them without suffering inconvenience in the neck and eyesight? Some light and aërial subject is the only one at all proper, and the walls must accord with the principal painting, by being tinted in a very soft tone.

The better sort of paintings should be applied on vertical walls; and here the architect may have an opportunity of projecting extraordinary designs, converting the sides of a room into a spacious country, or enriched with other objects equally instructive and delightful. The plinth should appear marble, from which should rise columns with landscape in their openings. It appears inconceivable how other pictures can ever be used; and it is astonishing that the antivitruvian arabesques, now so much admired under the imposing name of Raphael, should still be adopted.

If the architect be friendly to the painter, he will employ the various marbles according to the convenience of the subjects. Those of lively colours are suitable to the decorations of triumphal arches, fountains, theatres, and apartments. In temples and altars, those of varied colours are most proper; and in tombs, nothing gay can, of course, be admitted. In combining those of various colours to produce a picturesque effect, we must consider well those that are light, dark, accordant or discordant, and follow the pictorial maxim of never uniting discordant colours, nor of passing into violent extremes.

PART II.

ON PROPRIETY.

THE propriety of every edifice comprehends three principal objects, which are, 1st, its situation; 2d, its form; 3d, the distribution of its parts. Points of the utmost importance and difficulty. There are buildings in which the architect has had his full liberty, uniting every pleasure, convenience, and economy, with beauty of form and situation.

SITUATION.

The conditions necessary for a good situation are the following:

1st, A good soil, salubrious and fertile, neither sandy nor clayey, proper for gardens, exempt from inundations and earthquakes, and distant from stagnant waters and falling mountains.

2d, A wholesome air, which is our natural element, and which we can only have in situations equally open and elevated, where there is a continued renewal by gentle ventilation, not by violent concussions, like that proceeding from chains of mountains.

3d, A sufficient supply of good water is one of the greatest necessities for the support, comfort, convenience, and pleasure of life. To place one's self near unwholesome water, is to venture into the regions of pestilence.

4th, The aspect of edifices must vary according to the variety of place and climate. But provision must always

be made against extremes of heat, cold, violent winds, dampness, and unpleasant odours.

5th, The prospect should neither be too confined nor too extensive, but enriched with the picturesque, and tending to assist the labours of the architect.

6th, Local convenience, which consists in having easy access to all the necessities and comforts of life, removed from all causes of terror, surrounded by good roads, with a sufficiency of light : a well-selected situation will unite salubrity, convenience, and beauty.

FORMS OF EDIFICES.

The architect may adopt all the figures of geometry, from the circle to the most lengthened ellipsis, and from the triangle to the last polygon. He may also adopt mixed figures, thus varying the form of his edifices to infinity, and always producing something elegant and regular, but never trifling. Variety is invariably agreeable when removed from absurdity, and adapted to the strength and convenience of each building.

The circular has the advantage of being the most graceful and capacious of all the figures, as well as the strongest. But it is disadvantageous, from the quantity of space lost in the angles and internal arrangements, and from the difficulty of distribution of light, the arches, and the intercolumniations. It is therefore most appropriate to those edifices in which no division is required, as in temples, theatres, and piazzas. The ellipsis has less beauty, and is still more inconvenient, but it is useful.

The triangle, which, of all the rectilinear figures has the worst effect in architecture, may be used in some narrow parts of dwellings, for the stairs and returns of the angles, thus enabling the other parts to be arranged with some regularity. Squares, rectangles, and parallelograms, are

proper for churches, polygons, piazzas, and markets; mixed figures, for all other descriptions of edifices.

DISTRIBUTION OR ARRANGEMENT.

Architectural arrangement may be considered in two points of view: one with regard to the ground-plan of an edifice divided into its internal parts; the other, the external division of the elevation or the decoration of the façade. The arrangement, whether external or internal, should be proportioned and agreeable to the character of the edifice. It would be ridiculous to see a large palace divided into an infinity of cells, small orders and windows: equally absurd would be a small house with only one large saloon, and stately ornaments.

The arrangement of the interior should accord with that of the exterior. Façades of two orders are admirably calculated for our churches, which are never divided internally into stories.

In all edifices, the noblest and most beautiful parts should be placed in the most agreeable and advantageous situations, and a perfect whole should be produced, suitable to the purpose for which it may be intended.

For the better understanding of the laws of arrangement, we will consider, first that of an entire city, then the houses of which it is composed.

ARRANGEMENT OF A CITY.

In the rare case of founding a new city, the most advantageous spot would certainly be selected, and a circular or polygonal plan adopted.

A city requires squares of various forms, and streets cutting each other in various directions, and differing in

size and decorations. In this arrangement, there should be quantity, contrast, and even some disorder, to produce beauty and elegance. Extreme uniformity is an essential fault in a city. Whoever has seen one city of Holland, has seen all; and one street is sufficient to give an idea of the whole city.

The plan should be so arranged, as to subdivide the whole into an infinity of particular beauties, each so widely differing from the other, that something new should be continually presenting itself to the eye. Four things are requisite to form a beautiful city: 1st, its entrances; 2d, its streets; 3d, its squares; 4th, its edifices.

1st, The entrances should be free, numerous in proportion to the size of the enclosure, and sufficiently ornamented both within and without. On the exterior should be a long road, with rows of trees on each side, and fountains, terminating in a square before the gate; which should be a superb triumphal arch, giving admittance to another square, surrounded by noble buildings, several majestic streets branching off to various parts of the city, all terminated by some particular object. Such should be the entrances.

2d, The streets are for the purpose of rendering the communications easy, they should, therefore, be numerous, straight, and wide: their width must correspond not only with the size and population of the city, but also with the height of the edifices, and with their own length. The greatest width should be in the centre, where the traffic is greatest. Some should be porticoed, others have footways, ornamented by balustrades and statues, others with parterres; but all clean, and of an easy inclination.

3d, The squares should be numerous and varied in figure and size, not only for the use of the people, but for the salubrity of the city, and to give a more spacious effect.

4th, The beauty of the edifices constitutes the principal

beauty of the streets, squares, and city in general. And who should preside over this department?—Every city should have its academy of architecture, without whose approbation nothing should be erected. The height of the houses should never be more than three stories, their façades regular, and well proportioned, all equally simple, but differing in their style and ornament. Uniformity should be admitted in the squares only.

The public edifices should be so placed as to suit the public convenience. The cathedral in the centre, the parochial churches in the midst of their parishes, the university, the theatres, the tribunals, the academies, and colleges, in the most inhabited parts. The residence of the sovereign at the extremity. These should all be isolated, with squares in front, and streets leading in and out. Thus a magnificent effect would be produced.

But to have a city regular and beautiful, it is not necessary that it should be built from the foundations. Any, however mean and ill formed, may, by degrees, become regular and beautiful; as the various parts are rebuilt and repaired: all that is required is knowledge and inclination in its inhabitants.

The edifices of a city are either public or private.

ARRANGEMENT OF PRIVATE EDIFICES.

PALACES.

Arrangement has always in view, convenience, eurythmia, symmetry, and solidity. Convenience, which consists in various degrees of magnificence, according to the dignity of the proprietor, and in disposing the principal members in a greater or less space, in a variety of forms, gradations of light, &c. Eurythmia requires regularity with regard to the opposite compartments, a relation between the

different parts of a room, and a line should pass through the great hall, generally placed in the centre, so as to enfilade the edifice, and correspond with those in the wings. Lastly, solidity, which requires that the principal walls should be thick in proportion to their height and the weight they have to support, they should unite with the partition walls, so as to form a whole: care should be taken to place these one over the other; that the arrangement of the principal floor should not interfere with any part of the ground floor, especially if the latter be intended for the use of company or parade; also, that the apertures should be sufficiently removed from the angles.

The entrance should always be in the centre of the façade. The vestibule, either simple or with wings, may be variously formed, and solidly decorated with stone. The court following it, porticoed according to the style of the palace. The grand court different, if flanked by smaller ones, for stables, coach-houses, kitchens, &c. It is necessary that all the courts be protected from the sun, and the internal buildings higher than the external, and covered with terraces ornamented with statues, hanging-gardens planted with flowers, to embalm the air, and produce an agreeable effect from the entrance and from the street.

The second floor should be sufficiently elevated to light the parts below, and appropriated to cellars, not to kitchens or stables. The second floor should be made capable of every convenience for domestic comfort, and the state apartments for ceremony.

STAIRCASES.

The staircase of a palace has many requisites, — 1st, situation; 2d, form; 3d, proportion; 4th, light; 5th, decoration; 6th, construction.

1st, The proper situation of a staircase is that where it can be seen immediately on entering the hall. But this is not sufficient, it must be seen to advantage, and have the effect of importance, which will not be the case, if, in order to reach it, we have to cross a court or go round the porticoes. The best situation is in one of the sides of the vestibule, with a handsome decorated approach.

2d, If the form of the staircase is not quadrangular, it is inconvenient; and the principal requisite of a staircase is convenience. Architects have certainly amused themselves by adopting forms the most absurd; the spiral is undoubtedly admirably calculated to produce vertigo: but quadrangular staircases may be diversified into polygons, circular, elliptical, mixed figures. Here we have a variety of elegant forms, without offending against convenience or security; since, whatever form the whole may be, the branches, whether simple or double, will always be quadrangular, and the steps rectangular and parallel.

The staircase must be proportioned to the edifice. In general habitations the length of the steps is not less than 6 feet, and in large edifices not more than 12. At every fifteen or twenty stairs, a space, or landing, is required. The height of the step should not be more than 6, nor less than 4 inches; in the first case the width should be 12, and in the second 16. These relations are founded on our experience of their convenience.

4th, Convenience, security, beauty, all require the staircase to be well lighted. The light should not, therefore, be admitted at the sides, but in front, or from the top, by means of a lantern, which produces also a good effect, both internally and externally.

Neither columns nor balustrades should stand on the steps; these ornaments are only calculated for the landings, where there may also be statues and other sculptures. A more decorative effect is also produced by the staircase terminating opposite the principal door of the

state apartment : to which should be added a sumptuous vestibule. The steps should never be of polished marble, and always in an horizontal position.

6th, Finally, the mechanism shewn in the construction constitutes the principal value of a staircase ; the elegance of the vaulting, the cutting of the stone, the fitting and uniting of the whole well together, is requisite both for real and apparent solidity.

APARTMENTS.

The apartments, for convenience, society, and public ceremonies, should be situated on the principal floor, and only differing in their position, size, and number : all should be easy in their communication. An opportunity is here offered for the display of architecture in all its grandeur ; in the halls of audience and conversation, in the galleries, academies, museums, and libraries, the architect may shew the most consummate skill and learning, whether he shall adopt the ancient Corinthian hall of one order, or the Egyptian of two, the triclinium, or copy the various models of theatres and amphitheatres.

Finally, in the chambers care must be taken to avoid all confinement, narrow corridors, &c., so that the air may be continually renewed.

DOORS AND WINDOWS.

The form of doors and windows should be agreable to the proportions of man, for whose use they are intended : and man being from two to three times higher than he is wide, when holding his arms in an easy position, it follows, that the figure of the doors should be rectangular, and of the above proportions. Large gates,

as those of cities and principal doors, may be arched, for greater strength; but no good reason can be assigned for diminishing the doors and windows.

The width of large doors and public gates may be from 8 to 20 feet, those of moderate size from 4 to 12 feet, and the smaller ones from 4 to 6 feet. The height must be regulated by the size of the edifice.

Their decoration consists in their jambs being more or less ornamented. Columns are rarely used to internal doors and windows.

Several doors enfiling should be in one right line; the windows equal in their distances, and proportioned to the doors. The width of the large windows should not be more than 6 feet, and that of the smaller ones not less than 4 feet. In every façade the solid should be greater than the opening, and weight should be placed on weight, the void over void.

CHIMNIES.

Whoever is desirous of having chimnies free from smoking, retaining all the heat, and consuming a small quantity of fuel, will consult Franklin, who has applied philosophy to the conveniences of life with admirable clearness and simplicity. Their best situation is opposite the windows, and their most beautiful decoration a simple jamb, supporting a plain polished cornice.

COMPARTMENTS.

Compartments, of whatever description, whether in pavements, in the squares of façades, the internal coverings of walls, soffits either level or vaulted, or in roofs, should correspond with the quality of the edifice, its form

and material. Generally speaking, their design should be large, in proportion to the spaces for which they are intended. A paving of delicate Mosaic is consistent for a boudoir, not for a saloon. How offensive are those compartments of trifling ornaments in the piers of the lesser naves of the stately St. Peter's. Fish and quadrupeds are improper in a pavement, where they would not be placed in reality; equally absurd is it to see lions and dolphins in soffits and on the sides of roofs.

FACADES.

The façade is to an edifice what the physiognomy is to man; and it is most unfortunate when, in either case, the exterior is enigmatical, or contradicts the quality of the interior. Façades may be considered perfect, when in their decoration, symmetry, and eurythmia, they adequately express the internal distribution and construction, suitable to the nature of the edifice. Various façades should express the various purposes of the interior of buildings.

In royal palaces the façades should be ornamented either with one order of architecture to the state floor, supported by the ground floor, as a sub-basement, or with two orders, one on the ground floor, having the upper entablature crowned by a rich balustrade. Other palaces should be decorated according to the rank of the personages inhabiting them. Between the splendour of this species of building and the simplicity of private houses, there is a medium style of decoration, the Ionic for citizens of the highest class, the Doric for the façades of merchants; even in habitations of less importance there should be nothing offensive, and it would cost but little to decorate them in a style, announcing both taste and elegance in

the interior. The beauty of a country is much improved by splendid works in architecture.

GARDENS.

The Chinese taste of giving to their gardens the simplicity, and sometimes the caprices of nature, is rapidly producing a disgust for our unnatural and absurd style. The English no longer have recourse to France and Le Notre, but to China; and Whately has prescribed laws which banish every affected regularity, and produce scenes of enchantment, wildness, and sweetness, which continually surprise with some new delight. In fact, he presents us with a perfect picture.*

ARRANGEMENT OF PUBLIC BUILDINGS.

It is easy to decide on the situations most proper for public buildings of a great city, as Tribunals, Colleges, Universities, Exchanges, Baths, Theatres, Churches, &c., which should all be surrounded by large squares, and opposite to principal streets. With regard to the internal arrangement, as well as the external, we have elsewhere said, *that* all should correspond with their respective uses, as is amply detailed in the “Principles of Civil Architecture.”

* Since the time Milizia wrote, the style of Landscape Gardening in England has assumed a character totally different; and, since Whately's book, the subject has been much discussed, and the works of Kent, Brown, and others, and the publications by Price, Knight, Repton, &c. have introduced a style more accordant to the pleasing and endless varieties of Nature, and which, over all Europe, has obtained the name of “English Landscape Gardening.”

Hospitals, Cemeteries, Lazzaretti, Shambles, Magazines, and Manufactories of every description, should be without the city, in open spaces, and well ventilated.

CHURCHES.

Architecture ought to be displayed with the greatest sublimity in churches, which neither in the exterior nor interior should have any thing in common with other buildings. Suppose a church at the extremity of a large wide street, in the midst of a regular square, it should be constructed of large stones well united, and its solidity should be conspicuous and striking. Its exterior decoration one single order, regularly placed on a basement of a few steps: the intercolumniations equal, the entablature running all round without any projections, and one pediment crowning the august front. The rear should be ornamented with the same order, and in the centre of the pediment an arrangement for the clock and bells. On entering, the whole should present itself at one view. There should, therefore, be neither recessed chapels nor large piers; but isolated columns of the same order with the exterior, which give a species of life, and present at every step a delightful variety of view. There must be no cornices, and every altar beautiful only from its simplicity, not having columns on pedestals, supporting a pediment or roof, cupolas, mausoleums, or any thing that can detract from the general harmony.

PART III.

ON THE SOLIDITY OF BUILDINGS.

Without solidity—beauty, magnificence, and convenience, avail but little. We seek for durability in every thing, how much more necessary is it then in buildings, which are erected at so much expense and trouble? On this very important subject we shall only here make some general observations.

A fabric may be considered solid when it has lasted for any length of time and is free from both injury and decay. Against this desirable quality there is continual warfare, from heat, cold, damp, weight, and wear; and our aim should be, to avoid the effects of these various actions as much as lies in our power.

Every edifice must be considered as a whole, composed of various parts united together. These parts are called materials, and are either stones, bricks, cement, sand, wood, or metals. The strength of the whole building depends on the particular strength of each, and the uniting of all these component parts: hence the duration of every building results from two things,—1st, the proper choice of the materials; 2d, of their proper employment; that is, of the true construction of the whole.

1st, The choice of materials, which varying according to different countries and districts, requires great knowledge in the architect. He must be well acquainted with all their qualities and differences, and be able to select those which best suit his purpose; nor will he be content with the popular opinions which are too commonly falla-

cious; but he will make useful experiments, so that at a glance, or a touch, he will be enabled to form a correct judgment, and detect every fraud: yet the greatest requisite in the character of an architect is *that true philosophy* which will teach him to be an honest man. Woe to him if he would be a Midas.

2d, The proper use of materials depends principally on three things:—1st, the quality; 2d, their distribution; 3d, their mutual connexion or construction.

1st, The quantity, of which sufficient should be used to render the building solid. An ill placed economy produces weakness, and consequent ruin; an excess of quantity causes needless expense and weight, and oftentimes offends the eye.

2d, All the materials have not the same degree of resistance; they should, therefore, be so arranged in the different parts of the edifice, that the weakest should be where the least strength is required, and the strongest wherever there is the greatest weight. Another point, requiring the discernment of the architect is, that materials of the same kind are not all equally good for every sort of work. Having thus discovered the secret of putting every thing to the best account, he will avoid superfluous expense, and will give to all their proper effect.

3d, As every building is the result of various parts united together, it is most necessary that there should be a mutual connexion between those parts and the component materials. Some parts are essential; as the foundations, the walls, the roof; others secondary, as the pavements, the ceilings, and the ornaments. Some support, others are supported, and so on. The best skill consists in so uniting these, that throughout there should be a proper equilibrium of strength.

In every edifice, then, it is necessary to distinguish between the parts supported and those supporting, and

there will always be a proper degree of solidity, if the latter be proportionably superior to the former. If we consider a wall detached from any other building, it forms at once its own pressure and support, because the upper courses rest on the lower, and thus are supported. If we examine a house, we find it composed of several walls, vaults, floors, and roofs; the latter are the weights of the edifice which the walls support; and the architect, in forming his plan, has to calculate the pressure, and regulate the strength of his supports accordingly.

There are weights which act vertically, as masses of walls rising direct from the foundation. Other weights are distributed here and there, to the right and left, as in vaultings; the gravity of which act in oblique lines. To calculate their pressure their curves must be measured, and the less the rise of the arch, the greater will be the thrust. Finally, there are the floors and the roofs, the pressure of which is vertical and in right lines, and the thrust in oblique lines. All this requires great exactness of calculation, consequently a thorough knowledge of mathematics.

It is always dangerous to touch the essential parts of an edifice once constructed. The thickness of the large masses is often deceptive; and it may be thought excessive, and that to remove a small portion cannot be productive of much evil; but the mischief is often suddenly and bitterly felt.

If for the third part a knowledge of physics and mathematics is required, for the second we must have a genius fruitful in inventions, and perfectly acquainted with all civil usages: as for the first, a purity of taste is necessary, acquired by observation and reason. The director of a building may, therefore, be considered a great man, who places himself at the head of a multitude of workmen executing a variety of arts subservient to his purpose.

Hence there is much reason in applying to the art of building the pompous title of architecture, that is, the "directing art to all others."

Many able men have written upon architecture, and have very properly brought it to a science. Whoever exercises, or intends to exercise it, should study these works, if he wishes to produce admirable designs for posterity, which is the supreme tribunal, whence he will receive impartial applause or condemnation. Philosophy, that is, the power of reasoning on every subject, which is become so general since the middle of the last century, has been introduced into the fine arts, and applied to the analyzing the truth of that sentiment we call taste. Thus philosophy, illumined by metaphysics, which is only the science of first principles, (every art and science having something metaphysical, their first principles being founded on constant and general observations), distinguishes the principles of the general and common taste of all classes, from those which are modified by the character, genius, and sensibility, of particular nations or persons. The architect will thus distinguish real beauty from that which is so by consent, he will study the impression of these sentiments on others, and make it his pleasure, by the means of mild and unostentatious reasoning, to evince that he has received from Nature, or from study, a more correct mode of thinking and feeling.

I have endeavoured myself to take advantage of the best information contained in the various authors on architecture, and having compared them with the edifices, ancient and modern, have collected all my observations in a treatise, entitled "the Principles of Civil Architecture;" divided into three parts; the first on the beauty, the second on the convenience, and the third on the solidity of architecture.

This work was printed first at Genoa, and a sketch of the same is given in the Essay on Architecture, prefixed to the "Lives of the most celebrated Architects," in the first edition at Rome, 1768.

The object of this work is to treat upon the History of Architecture, and if it presents a faithful picture of the varieties in human intellect, what a pleasing and instructive spectacle it offers to us. If the history of literature were more attended to, sciences and arts would make more rapid progress. Each professor would then see the features of his own mind portrayed in the various examples of his predecessors, and he would then be desirous of adding something to the treasures of preceding centuries, and each science would, like astronomy, be daily enriched with new and interesting observations. Had the ancients, instead of erecting statues to their great men, given us pictures of their minds, we might have had useful memorials, and should have been better informed on the principles, the progress, the revolutions of the arts and sciences, and on the discoveries of remote ages; a species of history, much more interesting to us than that of battles, wars, heroes slain, and useless dates: but we cannot expect such histories without the guidance of philosophy. History teaches what men have done; philosophy goes further, she examines, and points out to us what we ought to do.

The history of artists is contained in their works. In describing their architectural productions, it is necessary to shew the means they used to surmount obstacles and arrive at excellence: and here we have sometimes a painful task. We are all liable to err, which, however melancholy to reflect on, is sometimes useful to a mind capable of deriving improvement from reflection.

In every edifice here described we carefully distinguish between the truly excellent, the good, the me-

diocre, and the bad: all must endure the touchstone of our principles, or we shall be circulating as it were a base coin.

It behoves us, more particularly for the sake of youth, to expose the faults of great artists, as being generally less easily discovered, and more dangerous, from the authority which their elevated names impose; the splendour of which, like that of the sun, almost overpowering these spots; and authority has such power that it will convert even the drunkenness of Cato into a virtue.

The highest praise to which a reasonable man can aspire, however great his pretensions, is to be admired much and blamed but little. He who seeks only to discover the faults of others, deserves the punishment inflicted by Apollo on those who made him an offering of the errors of their fellow-creatures; viz. to peel a heap of grain and keep the husk for themselves. Gold itself is never without dross, and to separate the one from the other often costs more labour than it is worth. It would be cruel to caress the raven and neglect the dove. There is more talent in pointing out virtues than defects. While condemning any architectural vices, we at the same time must respect the architect.

“Parcere personis, dicere de vitiis.”

The limits between criticism and sarcasm are not always distinguished: offended vanity often discovers satire where none is intended. There is a copy of the “*Lives of the Architects*,” with marginal notes by the celebrated Luigi Vanvitelli, who had written on the first page, “The author of this satirical work is Francisco Milizia.”

But, wherever the author has discovered faults, he can with safety affirm that they gave him pain; and if he has exposed them, it is only with a hope of preventing, if possible, their recurrence and increase.

With an undeviating regard for the public benefit, he has thus endeavoured to compile a History of Architecture, hoping that, after describing its principles, progress, and changes, and detailing the means most conducive to its improvement, it will be long preserved from degradation, and be continually improving in strength and beauty.

CONTENTS.

VOLUME THE FIRST.

	PAGE
DEDICATION	ii
Preface	viii
Introduction, containing	xiii
The Origin of Architecture	xv
The Essentials of Architecture	xviii
The Changes of Architecture	xx
Of Beauty	xxi
Of the Orders	xxii
— Doric	xxiii
— Ionic	xxiv
— Corinthian	xxv
— Tuscan and Composite	xxvii
— Pedestals	xxviii
— Pilasters	xxix
— Intercolumniations	ib.
— Arches	xxx
— Orders above Orders	xxxii
Symmetry	xxxiii
Proportions	xxxiv
Eurythmia	xliii
Convenience	xliv
Use of the Orders	xlvi
Basement	xlvi
Pediments	xlvi
Balustrades	xlix
Niches and Statues	l
Sculptures	li
Painting	lii
On Propriety	liv
— of Situation	ib.
Forms of Edifices	lv
Distribution	lvi
— of a City	ib.
— Private Edifices	lviii
— Palaces	ib.
— Staircases	lix
— Apartments	lxi

CONTENTS.

	PAGE
<u>Distribution. Doors and Windows</u>	lxi
<u>Chimneys</u>	lxii
<u>Compartments</u>	ib.
<u>Façade</u>	lxiii
<u>Gardens</u>	lxiv
<u>Public Edifices</u>	ib.
<u>Churches, &c.</u>	lxv
<u>Solidity of an Edifice</u>	lxvi

OF THE ANCIENT ARCHITECTS.

FIRST BOOK.

CHAP. I. — Of the Architects before the Time of Pericles		1
I.	_____ from the time of Pericles to Alexander	42
III.	_____ from thence to the time of Augustus	60
IV.	_____ from thence to the Fourth Century	80

SECOND BOOK.

<u>CHAP. I. — Of the Architects from the time of Constantine</u>	
	<u>to Charlemagne 105</u>
II.	<u>from Charlemagne to the</u>
	<u>Fourteenth Century 123</u>
III.	<u>of the Fourteenth Century. 162</u>

THIRD BOOK.

CHAP. I.	_____ of the Fifteenth Century ..	179
II.	_____ of the Sixteenth Century ..	202

VOLUME THE SECOND.

CHAP. III.	Of the Architects of the Sixteenth Century.	I
IV.	————— of the Seventeenth Century.	133
V.	————— of the Eighteenth Century.	260

OF THE
ANCIENT ARCHITECTS.

BOOK I.

CHAP. I.

OF THE ARCHITECTS BEFORE THE TIME
OF PERICLES.

450 Years B.C.

As the Chaldeans boast of having been a nation 500,000 years, it is not an easy task to ascertain either the number or names of their architects.

King Ninus* founded the city of Nineveh of a rectangular form, 74 miles in circumference; and surrounded it by a wall of sufficient width to admit three chariots abreast: it was 100 feet high, and defended by 1500 towers, each 200 feet in height. Alberti endeavours to impress the belief that this work was executed in fifteen days, which seems impossible. The queen Semiramis,† not satisfied with this immense city, built another near it, which she called Babylon, of a quadrangular form: each

* Diodorus Siculus, lib. ii. cap. 1. (Ann. Mun. 2737. Usher Ann.) Before Christ 1950 years, or about the time of Abraham's birth, according to most chronologers. Nineveh is supposed by Pococke to be the modern Mousul.

† Semiramis, according to Usher, lived 1215 years before Christ.

side was 15 miles long, and had twenty-five gates of bronze (see Isaiah). From each gate a street was formed to that opposite, making altogether fifty streets, each 150 feet wide; which crossing at right angles divided the city into 676 parts. Each quarter had houses of three and four stories in height, all beautifully ornamented; the middle courts were formed into convenient and delightful gardens. The walls* were built of large square stones, cemented by bitumen; their height was 350 feet, their breadth 87; defended by 250 towers. The river Euphrates ran through the middle of the city, over which was a bridge of stone,† 5 stadia long, and 30 feet broad, cramped together by iron, and covered with beams of cedar, palm, and cypress. At each end was a royal palace: the smallest was 7 miles in circumference, and both contained hanging gardens. These must have been extraordinary efforts of industry, if we credit the accounts given of them, viz. that they were raised on a square bank of earth, cut into terraces resembling an amphitheatre; the highest being on a level with the walls of the city: the whole supported by internal and external walls, the latter

* Herodotus, lib. i. sect. 178. "The wall is 200 royal cubits high and fifty wide." Further, in sect. 179, he says the city was surrounded by a trench or ditch, full of water, and that the earth dug out was made into square bricks and baked in a furnace, being first of all laid in heaps till a sufficient quantity was obtained. They used for cement a composition of heated bitumen, which, mixed with the tops of reeds, was placed betwixt every thirtieth course of bricks. Having thus lined the sides of the trench, they proceeded to build the wall in the same manner. Pliny, lib. vi. cap. 26, says, that Babylon contained on each side 60 Roman miles. Diodorus Siculus probably gives the fullest and best account of the city of Babylon, lib. ii. cap. 1: he quotes the authorities of Ctesias the Cnidian, and Clitarchus, who accompanied Alexander into Asia.

† Herodotus, lib. i. sect. 186, says, that "this bridge was strongly compacted with iron and lead; over which the inhabitants passed in the day-time by a square platform, which was removed in the evening to prevent acts of mutual depredation. When the bridge was built, the river

22 feet in thickness. These terraces were formed by square stones, 16 feet long and 4 broad, on which was laid a stratum of reeds, cemented together by bitumen ; then two courses of bricks laid in mortar ; afterwards a covering of lead ; and finally a stratum of vegetable mould sufficiently deep to admit the largest trees, and every variety of plant and flower, which were watered by an aqueduct supplied from the river. We cannot decide whether this account be true or false, nor can it in any way benefit the arts. In this city was also the temple of Jupiter Belus,* a quarter of a mile in height, and the same in width ; consisting of eight square towers piled on each other, gradually decreasing in width, and rendered accessible by an external winding staircase leading to the summit. This temple contained many colossal statues of massive gold ; the most splendid was that of Jupiter, 40 feet high, holding a sceptre composed of precious stones. Before it was an altar also of gold, 40 feet long, and 15 broad, the vessels belonging to which were all of the same metal, and of amazing weight. It has been imagined by some that this edifice was the remains of the tower of Babel, supposed by St. Jerome to have been 4 miles high ; and Adoni has stated it to be 5000. Without the walls of Babylon a square lake was dug, on

Euphrates was turned into a canal, cut for the purpose." This bridge consisted only of large masses of stone, piled upon each other at regular distances without arches : they were made to communicate by pieces of timber thrown over from one pier to another. — See Dr. Richardson's very interesting " Travels along the Mediterranean," vol. ii. p. 147, where is a dissertation on the passage or tunnel of Semiramis.

* Herodotus, lib. i. sect. 181, says, " the Temple of Jupiter Belus has huge gates of brass, which are still to be seen. It is a square building, each side of which is of the length of two furlongs. In the midst a tower rises of the solid depth and height of a furlong ; upon which, resting as a base, seven other turrets are built in regular succession."

each side 34 miles long: the whole of the interior was lined with bricks, covered with pitch: its depth was only 35 feet. This lake received the overflow of the waters of the Euphrates; for which purpose many canals were also cut. Some imagine it to have been made by Semiramis, to divert the course of the river, at the time she constructed a subterraneous passage* from one palace to the other: this passage was 20 bricks in thickness, 12 feet high, and 15 wide.

Semiramis founded cities and palaces throughout every province of her vast empire. The epitaph of Sardanapalus says, "I built Tarsus and Anchiale in a day, and am now no more." For these and other wonders the Babylonians have been reputed great architects, learned in the arts and sciences, and endowed with the faculty of invention: some have said, that Ninus, Belus, and Semiramis, not only ordered these surprising things, but designed and superintended the execution of them. If all this be true, how insignificant is our knowledge of art when compared with theirs! Others have suspected these wonders to be fables invented by the Greeks: but their supposed antiquity, and many accounts on which we rely, are not so well corroborated as the above.

The Egyptians, who in comparison with the Assyrians were but children, since they only assumed 30,000 years of antiquity, equalled in magnificence the rest of the ancients. Thebes,† which was built after the style of Babylon, was so populous, that in times of war 10,000 warriors issued from each of her 100 gates. The city, therefore, must have contained 1,000,000 soldiers; consequently, at least a population of 5,000,000; and yet the whole of Egypt never contained more than that number: but this is a trifling difficulty to surmount. Memphis,

* Diodorus Siculus, lib. ii. cap. 1.

† Ibid. lib. i. cap. 4.

also, did not yield to Thebes, either in grandeur or magnificence. From these traditions we turn to the vast pyramids* which still exist, those certain proofs of despotism. Near them was a bridge, 5 miles long, 60 feet wide, and 80 feet high, of polished stone, on which were sculptured a variety of animals.

The palace in the vicinity of the cataract, near the ancient Siene, had four grand colonnades, the columns of which were placed together, three and three, in the form of a triangle, on the same pedestal; over the capital of each triangle was a sphinx and sarcophagus placed alternately. There were not less than five or six thousand of these figures, each cut from one block, and 70 palms high, besides many other gigantic statues. There were also innumerable grottoes cut out of the rock; the mass above was supported by prodigious square pillars, left for the purpose; the whole were ornamented with sculpture, and sufficiently large to admit 600 horsemen ranged in order of battle; these led to the catacombs containing the mummies. Another palace† near to Dendera, (not improbably the Temple of Serapis,) was of a surprising height, and supported by porticoes of granite columns, 120 feet high, of such thickness that eight men could scarcely span them; the capitals were composed of four highly decorated female heads, the pavement was formed of stones of a large size. The Egyptian temples had in front a dwarf wall, adorned with sphinxes; then a portico or propyleon, usually two, but sometimes three; and finally

* Diodorus Siculus, lib. i. cap. 5. Herodotus, lib. ii. cap. 101, Josephus, Antiq. Jud. lib. ii. cap. 9, mentions these pyramids. At Memphis, about thirty pyramids still exist, and there are traces of many more; the stone with which they are built is calcareous, fine-grained, of a light grey colour, easily cut, light, and porous; the masonry laid in mortar.

† See Dr. Richardson, vol. i. p. 186, who describes the present state of most of these buildings.

a vestibule with a well-proportioned cell. Equally wonderful was the artificial lake of Mœris,* 450 miles in circumference, and 50 braccia deep; with innumerable canals and reservoirs to receive the inundations of the Nile. Of the Labyrinth† we shall speak hereafter. It is remarkable that not one architect has ever been named among the accounts of these prodigious efforts.‡ However stupendous these and other works may have been, it is evident that the Egyptians had only made the first step towards decoration. Their columns were simply imitative of the trunks of trees, the capitals were unornamented square stones; and frequently they united several columns, for the purpose of supporting a great weight, but without attending to the refinement of architecture.

The Hebrews left Egypt ignorant of its architecture, although they were servilely employed in the erection of its principal buildings. Bezaleel and Aholiab, nominated by Moses to construct the tabernacle, were, by the Almighty Architect of the Universe, “filled with wisdom, understanding, and knowledge, to devise curious works in gold, silver, and brass, in cutting of marble and precious stones, and in carving of wood:” all the artisans employed in this vast work were likewise by Divine inspiration endued with knowledge, that they might follow the orders of the two principal architects. But the Hebrews were never inclined to the arts and sciences,

* Herodotus, lib. ii. cap. 149.

† Ibid. cap. 148.

‡ Upon the whole, there are yet, it is said, in existence, in Upper Egypt, five palaces and thirty-four temples: the most ancient have been constructed chiefly with sandstone, and a few with calcareous stone. Granite was only used in obelisks and colossal statues. After the seat of empire was removed to Memphis, granite was made use of: immense masses were extracted and carried from Elephanta. The sanctuary of Minerva at Sais, and Latona at Buto, said to be cubes of 60 feet, were floated 600 miles from Philæ and Elephanta.

nor were they improved by the instructions of these two masters of architecture and sculpture; therefore Solomon, when about to erect his famous temple, sent to Tyre for the architect Hiram, "who was filled with wisdom, understanding, and knowledge, to work all works in building and sculpture." Of the magnificence of this temple we are informed in the book of Kings. That it was of the Corinthian order, and Solomon's palace of the Doric, are mere efforts of the imagination; we learn only that the temple was beautiful, and furnished with costly vessels. Josephus makes the columns of the temple 18 cubits high, 4 in diameter, and the capital 5 in height, of the form of a lily; but this corresponds with no order of ours.

We know likewise that it could not be a very large edifice, because, independent of the houses and adjacent buildings for the use of the priests, the sanctuary was only 60 cubits long, and 20 wide; with a portico 10 cubits wide in front, and 20 long. An Hebrew cubit is about 22 of our inches. Hence it is evident that it was of a moderate size; but beauty does not always consist in magnitude.

After the return from the Babylonish captivity, the temple was rebuilt on a more confined scale and in a less beautiful style; and still smaller was the last edifice, which Herod completed in a year and a half, during which time it did not rain a single day: he employed 10,000 excellent workmen, 1000 priests expert in building, and 1000 carts. Josephus also asserts, that this last temple at Jerusalem,* a city two miles and a half in circumference, astonished Pompey, who was born in Rome, and had visited Greece and Asia Minor. The same Herod built other edifices near the temple, in form of castles; but these it is agreed were mostly of wood, as they took

* Dr. Richardson, vol. ii. p. 256.

fire when Titus besieged the city, by which means he rendered himself master of it.

The Persian edifices were of a most extraordinary magnificence; the royal palace at Persepolis passed for one of the seven wonders of the world. The architecture was singular, and of quite a different style from the European. There are still to be seen in the ruins of Persepolis two fluted columns, the bases of which are composed of two large tori, the capitals being equal to half the height of the column, and their form extremely whimsical, bearing no resemblance to any thing with which we are acquainted, except the volutes at the top between a band of clumsy ornament. Serlio considers these columns to have been of the Corinthian order, but his opinion has never been adopted. The palace of forty columns was at the foot of a hill, and was approached by steps divided into two flights, each 27 feet 7 inches long, 14 inches wide, and 4 high; these flights and their landings of large stones were ornamented with columns; they seemed to diverge towards the middle, then converge at the top: the effect is graceful enough. Before the façade were two grand porticoes of columns 39 feet high, with gates, windows, niches, and sculpture of every description: the walls and cupolas of the apartments of this palace were covered with ivory, amber, silver, and gold; there were also a palm-tree and a vine composed of gems.

The Asiatics and Egyptians had erected stupendous monuments, at the time the Greeks were in a state of barbarism. But if the latter were more tardy in giving proofs of their genius, they, by the simple arrangement of their cottages, arrived step by step at a complete system of architecture,—a system which other celebrated nations of antiquity did not know how to practise, even in their most magnificent buildings. Thus the Greeks, more by the

strength of their own genius, than from what they were enabled to observe in Asia and Egypt, introduced a regular style. Dorus, king of Achaia and Peloponnesus, erected a temple to Juno at Argos; in imitation of which, several others were built in Achaia, which were called Doric. But the proportions of this order were not then regulated, the height of the column being less than six diameters. Afterwards a number of Athenians, under the command of Ion,* emigrated to that part of Asia which was called Ionia; they there built a temple to Apollo Panionios, similar to that in Achaia, and made the columns six times their diameter.

TROPHONIUS AND AGAMEDES.

B.C. 1400.

THESE are the first Grecian architects of whom history makes mention. Both are said to have been sons of Erginus,† king of Orchomenos in Bœotia; and if not brothers, were certainly very intimate friends, passing their life together. They erected a temple in honour of Apollo, in a wood, on a mountain near Lebadea, a city of Bœotia, now called Livadea. The enclosure of this temple was of marble, 2 cubits high, on which were several obelisks in bronze. They also built the temple of Neptune near Mantinea, and the renowned one of Apollo at Delphos.‡ Cicero relates that, after having completed this last work, they prayed the god to reward

* Vitruvius, lib. iv. cap. 1.

† Pausanias, lib. ix. cap. 37.

‡ Ibid. lib. x. cap. 5. The fourth temple of Apollo at Delphos is said to have been built of stone by Trophonius and Agamedes, and this was burnt in the first year of the 58th Olympiad.

them by granting whatever was best for man—a sensible prayer;—three days after they were found dead—an admirable reward. Pausanias gives a different account of them: he says, that after having built many edifices by which they acquired great fame, they erected one in Livadea,* where Hyrieus lodged his treasure. The architects knowing for what use the edifice was intended, united certain pieces of marble in such a manner, that they were enabled to remove and replace them at their pleasure. By this contrivance they could enter and return without being perceived. Hyrieus soon discovering that his treasure diminished, laid a snare within the chest which contained it. Agamedes was caught; and Trophonius, unable to disengage him, cut off his head intending to carry it away, rather than subject his friend or himself to an ignominious punishment; but, the earth opening under him, he was buried alive. Here was afterwards the cavern and the so much frequented oracle of Trophonius, enriched with statues, altars, and temples, and where sacrifices and games called Trophoni were celebrated. A similar fable to this is related of Rhamsinatus,† king of Egypt; with this addition, that Rhamsinatus, in order to discover the robbers, had the headless corpse hung up to the walls of the temple, and placed sentinels to observe the countenance and manner of the spectators, with orders to conduct to him those who shewed any grief or distress. This was known to the mother of the deceased, who, almost driven to madness, induced the brother to recover the body, a corpse in Egypt being held in veneration. He then provided himself with asses laden with tubs of wine, and when near the guard, very dexterously upset them, feigning great distress. The soldiers immediately ran to save the flowing liquor; and whilst they were drinking and carous-

* Pausanias, lib. ix. cap. 37.

† Herodotus, lib. ii. cap. 121.

ing, he detached the body of his brother and carried it to the mother, without their perceiving it. The king, more enraged than ever on hearing this, had recourse to the following expedient; he promised to sacrifice the honour of his daughter to whoever would first divulge to her the most wicked and most artful action of his life. The young man in question presented himself, but was provided with an arm lately taken from a dead body; he confessed every thing to her, and she immediately endeavoured to arrest him; but he detached the false arm, and thus saved himself. At this fresh deception the king's fury was changed into admiration, and he promised pardon to the author of so much ingenuity: the young man went boldly to the palace, the king kept his word, gave him his daughter to wife, and made him a person of consequence.

The treasury of Hyrieus was different from that of Minyas, in Orchomenos, which was entirely of marble, in the form of a rotunda, with vaults terminating gradually in a point. Pausanias says, that the highest stone regulated the symmetry of the building, which he describes as one of the wonders of Greece, and the most sumptuous in the world. But this is contrary to the opinions of the Greek historians, who admired the productions of other countries rather than their own, describing with great precision the pyramids of Egypt, and omitting the treasury of Minyas and the walls of Tirynthus, built by the Cyclops,* with stones of immense size, and which are certainly not less wonderful than the pyramids themselves.

* Pausanias, lib. ii. cap. 25.

DÆDALUS.

B. C. 1250.

DÆDALUS was an Athenian of the royal family,* cousin to Theseus, and one of the great personages of those fabulous times which preceded the Trojan war. He erected many buildings in Memphis, so much to the satisfaction of the inhabitants, that they permitted his statue to be placed in the Temple of Vulcan; and afterwards raised altars to him, and paid him divine honours. His masterpiece was the Labyrinth in the island of Crete,† which he constructed to confine the fabulous Minotaur, the famous one in Egypt being his model. This latter was supported by columns of a prodigious size, capable of resisting the effects of time and the violence of men. The arrangement of the work, and the distribution of the parts, were remarkable, it being divided into sixteen principal regions, each containing a number of spacious buildings; consisting in the whole of three thousand apartments, half above the earth and half under, which altogether might be defined an assemblage of palaces. There were also as many temples as there were gods in Egypt, the number of which was prodigious; besides various other sacred edifices, and a number of lofty pyramids. The substructions of this Labyrinth still exist; and not being arched, it is surprising that, with so many stupendous edifices above them, they should have been so long preserved. After passing through places of great extent, the traveller arrived at that part, the different windings of which furnished Dædalus with the ideas of

* Diodorus Siculus, lib. iv. cap. 5. † Pliny, lib. xxxvi. cap. 13.

his Labyrinth. The entrance was by vast halls, then certain saloons, which conducted to grand porticoes, the ascent to which was by ninety steps. The interior was ornamented with columns of porphyry, and colossal statues of the Egyptian gods. This portion only was imitated by Dædalus in his Labyrinth, which was not a hundredth part the size of the Egyptian. That of Crete was, however, very spacious, surrounded entirely by a wall, and divided into a great number of separate parts, having doors on all sides; the number of which must, from necessity, have produced great confusion and intricacy. What would the ancients say, could they see the labyrinths we have introduced into our gardens? That described by Tournefort is very different, and, like a natural conduit, winds in a crooked and irregular way through the whole interior of a hill near Mount Ida.

It is said that Dædalus built many other edifices in Egypt, in Athens, in Crete, in Italy, and, above all, in Sicily,* where he lived for some time in the court of king Cocalus. He was an excellent sculptor; and to him are attributed many inventions in the art of carpentry and naval architecture. It is pretended that he invented the use of the sail, as also the legs to statues, they being before his time nothing more than rude trunks; hence the former were called Dædalian. "If this Dædalus," says Socrates, "whom we look on as our first master, were to return to the world, and to perform similar works to those that now pass under his name, they would render him ridiculous." The same may be said of many ancients whose works we so much esteem; revering them, still we should endeavour to surpass them: the first inventors seldom bring an art to perfection. He who hollowed out a tree to cross a river, did not perfect a

* According to Diodorus he built Agrigentum, and a palace for the king Cocalus: he made also a cave in the territory of Selinus, &c.

galley ; nor did he who first piled wood and stone together, imagine a pyramid. Every thing may be accomplished by diligence, since philosophers by the assistance of geometry teach us how to proceed with exactness ; and we no longer are contented with galleys, but build vessels of a hundred guns, not pyramids, but Vaticans. Dædalus' most distinguished pupil was his nephew, called by some Calus, by others Attalus ; he invented, among other things, the saw and the compass ; against whom Dædalus conceived so foul a jealousy, that he killed him. He was father of Icarus, of whom so many stories are told. There were many of the name of Dædalus, who have by some authors been confused and reduced to one, to render the history more wonderful ; as from several heroes named Hercules has arisen one whose life is an absurdity : this is the natural result of fable. Our Dædalus rendered himself famous by his knowledge, his misfortunes, his flight, and his evil deeds. Guilty of the murder of his nephew,* he fled to Minos in Crete, where he performed many wonderful things ; but convicted of a new crime, he was with his son cast into prison, from whence he escaped into Sicily, to king Cocalus, who with his court was so delighted with his abilities, that in order to preserve so great an artist, he entered into a war with Minos, who demanded that he should be given up.

* Diodorus Siculus, lib. iv. cap. 5. Dædalus, from rage and frenzy, murdered Talus, his sister's son. Talus for ingenuity excelled his master, and invented the potter's wheel ; he got likewise a serpent's jaw-bone, and with it sawed a piece of wood asunder ; then, in imitation of the teeth in the jaw, he made the like in iron ; so he found out an instrument for the sawing of the greatest pieces of timber. He invented also the turning-lathe, and many other tools for the use of artificers ; upon which account he was in great esteem and reputation.

ERYSICHTHON.

ERYSICHTHON, the son of Cecrops, began the Temple of Apollo in the Isle of Delos, which was afterwards finished at the general expense of Greece, and became one of the most superb edifices in the universe. It contained, among many other costly things, an altar* which deserved to be considered among the wonders of the world; it consisted of the horns of different animals, joined together without any apparent ligature.†

EURIALUS AND HYPERBIUS.

Two brothers, who, according to Pliny,‡ were the first in Athens who made bricks, and built houses; the primitive habitations being merely caverns. But the learned say, these personages, like other pretended inventors of the arts, whom Pliny mentions, were only fictitious and symbolical names.

Eurialos signifies *space*, and hence expresses a person, who before he invented the art of building lived in the

* Strabo, lib. x.

† The trunk of the famous statue of Apollo, mentioned by Strabo and Pliny, is still an object of great admiration to all travellers. See Plutarch (on Nicias) for an account of the palm-tree, &c. set up by Nicias, which being blown down, destroyed the celebrated statue set up by the Naxians. Many remains of broken columns, architraves, capitals, &c. remain to this day in a confused heap.—TOURNEFORT'S *Voyages*, tom. i. p. 342.

‡ Pliny, lib. vii. cap. 56.

open country. *Hyperbius* denotes one who lives on high and above the ground, that is in a house. The inventor of mortar was called *Dokio*, son of *Cælos*; but *Dokios* signifies *cement*, and *Cælos* a *cavern*. *Cynarus* (the action of fire,) son of *Agriopus*, invented tiles at *Cyprus*, and the fusion of metals. *Danaus* is made to come from *Egypt* into *Greece*, to sink wells. *Daneion* signifies *borrowed*; and anciently, *Athens* and *Argos* had only one well, which belonged in common to the two cities, the one borrowing water from the other. *Cadmus* invented, at *Thebes*, the cutting of stone; *Thrason* (enclosure) was the inventor of walls; the *Cyclops* (a circle) invented towers and fortresses.

It is not unlikely that the above names, as well as many others given to the first inventors of useful things, were ideal. It is difficult to know who were original discoverers, few having completed a work entirely; an assemblage of trifling inventions, produced by many hands, is often made, and perfected by an individual who is perhaps called the inventor. And little do our modern projectors imagine, they are constantly reproducing what was done centuries ago.

HERMOGENES.

WE know not at what precise time this architect lived; he was a native of *Alabanda*,* a city of *Caria*, in *Asia Minor*. He built the Temple of *Bacchus*† at *Teos*; his

* *Vitruvius*, lib. iii. cap. 1.

† *Ibid.* lib. iii. cap. 2. The Temple of *Bacchus* at *Teos* is said by *Vitruvius* to have been octastyle, pseudodipteral.

first intention was to use the Doric * order; but although the marbles were cut, and every material prepared, becoming embarrassed by the difficulty of attending to that rule, which obliges the triglyphs to be over the axis of the columns, the metopes square, and moreover the triglyph at the angle to be placed at the extremities,† he changed his intention, and used the Ionic. It was octastyle and monopteral, that is, without any walls to form the enclosure of the cell.‡ The remains|| are still seen, and have been accurately measured and delineated by Mr. Revett and other artists, sent out by the English Dilettanti society, (see *Ionian Antiquities*). The bases of the columns are without plinths, and the *outer* capitals have angular volutes.

In Magnesia, § a city of Asia Minor, he erected a temple to Diana, likewise of the Ionic order, pseudodipteral, that is, *false double-winged*; consisting of eight columns in front, as many at the posticus, and fifteen in the flank, comprising the angular ones: thus the effect on looking at the façade was that of a temple with double wings, though, in fact, pseudodipteral; having simply the outer range of columns. The distance from the columns to the walls of the cell was two intercolumniations, and the diameter of a column. Vitruvius praises Hermogenes exceedingly for this invention, and with reason, for expense and

* Vitruvius, lib. iv. cap. 3.

† The metopes which adjoin the angular triglyphs are not square, but longer by half the breadth of the triglyph.

‡ Lib. vii. preface. Vitruvius alludes to Hermogenes having written on the monopteral Temple of Bacchus at Teos.

|| The lower diameter of the columns is 3 feet 3 inches 6-tenths, but the height is not given; this temple is not at all fully measured, as materials do not remain to admit of it: the architrave is 2 feet 5 inches 4-tenths high; the fragment of a lion's head, and a piece of ornament, is all that remains of the cornice.—*Antiquities of Ionia*, vol. i. p. 8.

§ Vitruvius, lib. iii. cap. 1, 2.

labour are spared, and there remains a larger space as an ambulatory; * and the appearance is also rendered equally majestic, as if the side had two separate ranges of columns. Hermogenes made many other discoveries, on which he wrote a treatise, † existing in the time of Augustus, which acquired him the title of the most celebrated architect of antiquity. Vitruvius calls him the father of pure architecture, to whom we are not only indebted for the invention of the pseudodipteral distribution, but also of the greater part of those other arrangements by which its original rudeness and simplicity were polished and enriched.

RHÆCUS AND THEODORUS.

RHÆCUS ‡ was of Samos, || and, with his son Theodorus, rebuilt in that place the famous Temple of Juno, § erected at first by the Argonauts, ¶ and afterwards burnt by the

* Vitruvius, lib. iii. cap. 2.

† Ibid. preface to book vii.

‡ Herodotus, lib. iii. cap. 60, says, “ Rhæcus was son of Phileus, and that this temple exceeded in grandeur all that he had seen.”

|| Vitruvius, lib. iv. cap. 1, is of opinion that Samos, and the thirteen towns of the Ionian confederacy, were built by Ion the Athenian, who gave his name to the country of Ionia.

§ The Heræum, or Temple of Juno, appears to have been a decastyle and dipteral temple, like that of Apollo Didymeus: the whole length appears to have been 344 feet, and in front, 166 feet; the diameter of the columns belonging to the outer peristyle is 6 feet 5 inches 4-tenths, but no satisfactory idea can be formed of the plan.—*Antiquities of Ionia*.

Rhæcus was not only a skilful architect, but he farther invented, in conjunction with Theodorus of Samos, the art of making moulds with clay. See Tournefort, *Voyage au Levant*, vol. i. for the present description of Samos.

¶ Pausanias, lib. vii. cap. 4.

Persians. We learn from Vitruvius, that in his time there existed a description of the temple by Theodorus, saying that it was of the Doric order, together with an account of the manner in which the whole was constructed.

This temple was decorated with a multitude of paintings, excellent sculptures, and a variety of rich ornaments. There were galleries adorned with antiques of great value, and an ample court for statues, among which were three of colossal size on one base, the work of Myron.* Marc Antony carried them away, but Augustus restored to the Samians those of Minerva and Hercules, contenting himself with sending that of Jove to the capitol. Verres, on his return from Asia, sacked this temple and carried away its most valuable treasures, and, under Pompey, the pirates completed the spoliation.

M. de Tournefort, towards the end of the last century, found remaining of this once stupendous edifice only two fragments of columns, and some marble bases. Some years before, the Turks, imagining that one of the bases was full of gold and silver, attempted to blast it with gunpowder, the pieces of which he saw. The same Theodorus, in conjunction with Zmilus and Rholus, constructed a labyrinth at Lemnos,† supported by fifty columns of an immense size, a work so well contrived, that Pliny prefers it to the labyrinth of Candia, and even to that of Egypt. These fifty columns were so well poised on their axis, that a child could turn them whilst the artificers worked them.

* Origen, lib. iv. contra Celsum. "The amours of Jupiter and Juno were painted on the ceiling of the temple, and represented so naturally, that Origen reproaches the Gentiles with exposing them to the eyes of the multitude."

† Pliny, lib. xxxvi. cap. 13. Zmilus, Rholus, and Theodorus, were the architects to the Labyrinth in Lemnos.

In Lacedemon, Theodorus erected an edifice, “said to be to Shadow,”* which was probably called so from its fine portico, to which was suspended the lyre of Timotheus of Miletus, who was punished by the Lacedemonians for having added four chords to the seven of the ancient lyre. Theodorus was eminent in sculpture, and to him is ascribed the invention of the rule, the level, the lathe, and the key; likewise that of melting iron and casting it into statues. But some have doubted this assertion of Pausanias.

EUPALINUS,

THE son of Naustrophus of Megara, flourished about the same time, and rendered himself celebrated by the aqueduct that he constructed at Samos. This work was regarded by the Greeks as a miracle, on account of the length of way that was opened through a mountain† for its passage. He also cut through a mountain, at the same place, for the length of 7 stadia, to make a road 8 feet high, and equally wide, bounded by a canal 30 cubits

* Pausanias, lib. iii. cap. 12, a building called Scias, was the work of Theodorus the Samian, &c.

† Herodotus, lib. iii. cap. 60, says, this way through the mountain was 7 furlongs in length, 8 feet in breadth, and as many in height. By the side of this, is an artificial canal, which, in like manner, goes quite through the mountain; and though only three feet in breadth, is 20 cubits deep; this, by means of pipes, conveys to the city the waters of the copious spring. Tournefort, Voyage au Levant, says, the spring which tempted the Samians to undertake this work, is still to be seen at Metelinous.

deep, and 3 feet wide, which served to conduct by various tubes the water to the city. There was also a remarkable mole, 120 feet high, which advanced 2 stadia into the sea. The third wonder of Samos was the Temple of Juno, the largest that has ever been seen, according to Herodotus. The ruins (according to Tournefort) are still remaining, about half a mile from the sea.

PTERAS.

It is pretended that the first temple dedicated to Apollo, at Delphos,* was formed of branches of laurel cut from a tree growing at Tempe: it must then have resembled a cottage. Pteras constructed another in a better form and as *Pteras* signifies *wings*, it was said to be raised by bees, from wax and wings. Pteras, to prevent a like fable, added a letter to his name, which he gave to a town built by him in Crete, called Aptera. An architect who builds a city with ability, may be allowed to give his name to it. This temple was afterwards built of brass. One so constructed would be a wonder amongst us—not so with the ancients. Acrisius had a brazen chamber made for his daughter, but we do not learn for what purpose. At Sparta, the famous Temple of Minerva was called *Chalciacus*, from its being built of brass. The grand and magnificent *Temple of Justice at Rome* astonished every one by its brazen ceiling. With all our skill, we can only use brass and bronze for instruments of destruction, or for culinary vessels, (cannon and bells,

* Pausanias, lib. x. cap. 5.

&c.) That this temple of brass was worked by Vulcan, that the walls were ornamented in gold by virgins who sang incantations like the Sirens of Homer, and that it was swallowed up and preserved by the earth, where it now remains entire, is the account handed down to us by the ancient writers.

SPINTHARUS.

B. C. 550.

WE only know that he was of Corinth, and re-erected the Temple of Apollo at Delphos, which had been destroyed by fire, and originally built by Trophonius and Agamedes.* The small cupola which was wanting, was afterwards added by Theodorus the Phocian. This temple,† the most famous of antiquity, was often exposed to accidents, and especially to plunder. Nero brought from thence five hundred bronze statues of gods and illustrious men. Among the most remarkable things in it‡ were the proverbs of the seven sages, and of the Amphitryons, cut in the vestibule, to instruct men in their conduct in life. “Know thyself,” and, “Nothing immoderately,”—this is advised to all, though too often uselessly.

* Pausanias says, lib. x. cap. 5, that the fourth Temple of Apollo was built by Trophonius and Agamedes.

† Ibid. lib. x. cap. 7.

‡ Ibid. lib. x. cap. 24.

CTESIPHON* AND METAGENES.

CTESIPHON,† a native of Crete, rendered himself celebrated by the design which he made for the famous Temple of Diana at Ephesus,‡ afterwards commenced by him: his son Metagenes finished it, gave all the details of its construction, and particularly of the machines invented by him to transport the enormous masses which were requisite for the work. The machine for moving the shafts of the columns from the quarries to the temple was extremely simple. Their weight being enormous, and the road very soft, to avoid the chance of the wheels sinking, they proceeded thus:—in the centre of each extremity of the shaft, they bedded in lead a pivot of iron; these pivots passed through holes in two large beams, 4 digits wide; at the ends were added two other beams of the same size, and as long as the shafts of the columns; at the angles were placed two cross pieces of holm oak to strengthen the frame; the pivots which passed through the holes of the beams, turned with so much ease, that as the oxen moved, the shaft continually revolved. To move the cornice they used wheels, in the middle of which it was incased and adjusted upright with pivots and rings, so that when the oxen drew the frame, the pivots went round in the rings to the motion of the wheels. These machines were simple and proper, as the quarry was only 8 miles distant from the temple, and between which, was a continued plane without hill or impediment.

* Chresophon, Chrysyphon, Chresipheon, Chtesiphron, Chersiphon: so it is variously written.

† Vitruvius, lib. x. cap. 6.

‡ Ibid. preface, lib. vii.

This temple was situated out of Ephesus,* in a marshy place, at the foot of a hill; such situations being considered by the ancients as least exposed to earthquakes. The expense of forming the drains must have been great, as the stone used for that purpose exhausted all the quarries in the country. These conduits and quarries are now taken for a labyrinth.† To remedy any inconvenience that might arise from damp, they very judiciously placed under the foundations strata of charcoal, and then strata of wool. Vitruvius‡ says, that its figure was octastyle, dipteral; that is, on all the four sides there was a double portico of columns, eight of which were seen only in front. All the designs which have been made of it by Menestrier, Perrault, Fischer, and Aulisio, are imperfect, and little conformable with the descriptions handed down to us. The ruins are still seen, but no idea of its original form can be obtained. The best description is that by the Marquess Poleni, which is to be found in an essay of the Academy at Cortona. The ascent to the portico was by ten steps. Vitruvius had not then given his rules why they should be unequal in number. The length of the portico was 398 feet, and its width, 193. The intercolumniations were two diameters and a quarter: the length of the cell was 245 feet, and its width 53.|| At one extremity was a niche, in which was a statue of the goddess. The

* Pliny, lib. xxxvi. cap. 14.

† Ibid.

‡ Vitruvius, lib. iii. cap. 1.

|| Pliny, lib. xxxvi. cap. 14. "The capitals, together with their architraves, friezes, &c., were raised by means of an inclined plane, formed of bags of sand, emptying those undermost when the mass was arrived, then letting them down gradually into their places."

These dimensions differ from Pliny; he says, 425 in length, 200 in breadth, and supported by 127 marble pillars 70 feet high, and that 27 were curiously carved.

temple was ornamented with 127 columns of fine Parian marble of the Ionic order, 60 feet high; 37 of which were the gift of as many kings, and were exquisitely worked.* Among these, one by the celebrated Scopas was the most admired. A small statue of ebony, representing Diana, which some impostor or fanatic had said had fallen from heaven, furnished the occasion for raising this temple, to the construction and embellishment of which all Asia Minor contributed with the most fervent zeal. This great work was in hand for 200 years, and was finished by Demetrius, a servant of Diana, and by Paonius of Ephesus; but it did not remain long, as Erostratus set fire to it to render his name immortal. From the same motive, a courtier of Charles V. threw his father and himself from the Church of St. Peter in the Vatican; to acquire fame, Democritus put out his eyes, if such a thing is possible, and laughed; Heraclitus cried for the same purpose, and Diogenes lived in a tub. If we were to take an account of all the follies committed by men, to render their names famous, that of Erostratus was not the most absurd. The Ephesians forbade his name ever to be pronounced: which surely was the very

* Pliny, lib. xvi. cap. 40, says, that the temple was 400 years in building. The timber used in constructing the roof was cedar.

Chandler, vol. i. p. 159. This temple was 420 feet long and 220 broad. The folding doors or gates had been constructed four years in glue, and were made of cypress wood, which had been treasured up for four generations, highly polished; these were found by Mucianus as fresh and as beautiful 400 years afterwards as when new: and the steps for ascending the roof, of a single stem of a vine, which witnessed the durable nature of that wood. The whole altar was in a manner full of the works of Praxiteles. The offerings were inestimable, and among them was a picture of Apelles, representing Alexander armed with thunder, for which he was paid 20 talents of gold. This structure was so wonderfully great in its composition, and so magnificently adorned, that it appeared the work of beings more than human.

way to immortalise him. It is said that Alexander the Great, who, by his false idea of glory, produced much evil, wished to rebuild the temple at his own expense, on condition that his name alone should form the inscription. The Ephesians rejected his offer with courtesy, replying, that it was not consistent for the god Alexander to erect a monument to a goddess. The expense of rebuilding the temple was afterwards defrayed out of the public money; and it was made much more magnificent than before, under the direction of the architect Cheiromocrates, or Dinocrates: and thus good was produced from the folly of Erostratus, who burnt it from the same feeling of vanity that induced the Ephesians to re-erect it: and he claims some thanks for not having destroyed the city entirely, the provinces, and kingdoms, as conquerors have done. But it is scarcely possible to imagine how a fire could consume an edifice of stone: it is possible that the roof, and some rooms within it, might be of timber; and these, together with the sacred utensils, would consequently be consumed. We may also admit that the burning timbers might have fallen on some of the capitals, and broken them, as well as discoloured the marble; but even this would not render the rebuilding requisite, or alter the plan: they therefore only cleaned the marbles, repaired the columns, and new-roofed it. It is thus we can explain how the people of Ephesus were capable of restoring that structure, to which so many cities and kings had contributed. This superb edifice was destroyed by the barbarians in the third and fourth century. Many of its finest ornaments now adorn the mosques at Constantinople.

GITIADAS

CONSTRUCTED* on a hill near Sparta, his native country, the brazen Temple to Minerva, Chalciæcus,† as has been mentioned before. In the interior were sculptured the labours of Hercules, of the Tyndaridæ, and other fabulous histories. This temple had corridors with two porticoes, which led to different altars, consecrated to the favourite deities of the Spartans: there was one to the Muses, the Lacedemonians marching to battle, not to the sound of trumpets, but of flutes and lyres. Perhaps it was for this purpose that Gitiadas composed several songs, among which was one to Minerva, to a Doric air. In another temple to the Martial Venus,‡ (a strange epithet for such a goddess,) was a Jupiter of bronze, not cast, but made of pieces riveted together by nails, and afterwards polished and rendered smooth. This statue is attributed to Dædalus.

CHIRISOPHUS

WAS of Crete,|| but it is not known when he lived: all that we have of his history is, that he built a number

* Pausanias, lib. iii. cap. 17.

† Ibid.

‡ Ibid. The statue was not in the Temple of Venus, but to the right of the Temple of Minerva, according to Pausanias.

There is a statue of St. Charles Borromeo, in the north of Italy, constructed in this manner.

|| Ibid. lib. viii. cap. 53.

of temples at Tegea, a city of Peloponnesus; dedicating one to Ceres and Proserpine, another to the Paphian Venus, and one to Apollo, in which was a statue to the honour of the architect.

ANDRONICUS.

It is also unknown at what period this architect lived: he was of Cerestus,* a country of Macedonia, and erected without the walls of Athens an octagonal tower of marble. On each of the eight fronts, was represented the emblem of the wind which blows against that side; it was crowned with a conical marble top, on which was placed a Triton in bronze, for a vane, which held in its right hand a wand so placed, that the wind moved it, and fixed it in such a situation, that the wand remained over the image of whatever wind was at that time blowing. But should a marine animal be so placed? These eight emblems of the winds were so sculptured, that each alluded to the particular effects it produced: thus Zephyrus was repre-

* Vitruvius, lib. i. cap. 6. Stuart and Revett's *Antiquities of Athens*, vol. i. The octagon tower of Andronicus Cyrrhestes is very accurately delineated from measurement, and described and restored in Stuart and Revett's *Antiquities of Athens*. The width of the outer face of each side of the octagon is 10 feet 9 inches 5-tenths, and of the inner 9 feet 4 inches; the walls are about 1 foot 7 inches thick; the whole height from the bottom step to the top of the cornice is 40 feet; the roof itself rises above the cornice about 5 feet 4 inches; the ground has accumulated around it to the height of 10 or 12 feet, and all the mouldings within reach are so defaced, that it is scarcely possible to determine their original form. The figures on the sides of the octagon are noble, bold pieces of sculpture, both for design and execution. In the interior of this building was a clepsydra or water-dial.

sented as a young man, with his body and legs bare, and flowers in his mantle; that wind blowing mildly at Athens, and being favourable to flowers: a bearded old man with sandals, and covered with a cloak, expressed the frigid Boreas. It is observable, moreover, that the roof of this tower was divided into twenty-four parts, by ribs of marble placed at equal distances, to indicate the other twenty-four winds distinct from the eight principal ones. No one of the dials was sufficient for the whole day, but, in succession, they shewed the hours as long as the sun was above the horizon. This building remains entire, among the celebrated ruins of Athens, and is called the Tower of the Winds: it is exceedingly curious for its antiquity, but not the most perfect in the details of its architecture: the exterior is of fine marble; the interior poor and dark; the outline and the sculpture mediocre.

METICUS AND EUPOLEMUS.

METICUS* formed a square at Athens, which bore his name, as did also an edifice built by him, in which the tribunal was held.

Eupolemus† of Argos erected a temple at Eubœa,

* Jul. Pollux, lib. viii. cap. 10.

† Pausanias, lib. ii. cap. 17. "On the right hand of Mycenæ, and at the distance of 15 stadia, there is a temple of Juno. The sculpture above the columns partly relates to the birth of Jupiter, partly to the battles of the gods and giants, and partly to the Trojan war and the destruction of Ilium. There are statues before the entrance of the temple, both of the women who have been priestesses of Juno, of heroes, and other persons; and, among these, of Orestes; for the statue which is inscribed with the name of Augustus, is said to be the statue of

dedicated to Juno. It was enriched with columns and sculpture, among which the statue of the goddess shone most conspicuous: it was of an extraordinary size, formed entirely of gold and ivory, and the work of Polycletus.* No deity of the heathens has received so much honour as Juno. This goddess was the queen of heaven, sister and wife of Jupiter, and presided over marriages, invented head-dresses, and every other fashion subject to female caprice: she had a temple in almost every part of Greece and Italy: that called Juno Lacinia,† six miles from Crotona, was one of the most famous. The accounts of its origin and foundation are fabulous; but it is agreed on by all, that it surpassed in extent the largest temple at Rome. It was covered with tiles of marble, some of which were conveyed to Rome‡ in the year of its foundation 579, by Q. Fl. Flaccus, to cover the Temple of (Fortuna Equestris,)—Equestrian Fortune, which he was then building. But this censor destroying himself, the senate had the tiles conveyed back from whence they had been taken.¶ — Annibal did not execute his design of removing a golden pillar from this temple: Strabo, Pliny, and Titus Livius, refer us to many miracles performed in this place; but the latter adds, “miracles are frequently attributed to these sort of places, particularly when distinguished by their riches and fame.”

Orestes. In the vestibule of the temple you will perceive on the left hand ancient statues of the Graces, and on the right hand the bed of Juno. In the vestibule, too, that shield is dedicated, which Menelaus took from Euphorbus, in the Trojan war.”

* This statue, according to Pausanias, had a crown on her head, in which the Graces and Hours were represented, and in one hand she held a pomegranate, and in the other a sceptre.

† Livy, lib. xxiv. cap. 3.

‡ Ibid. lib. xlii. cap. 3.

¶ Ibid. lib. xlii. cap. 28.

CALLIMACHUS

(B. C. 550)

WAS of Corinth, and an excellent sculptor : he was called by the Athenians *Catatechnos*,* the first of artists. Some authors say he was a painter : he is here ranked among architects, not from knowing him actually to have been such, but on account of his invention of the Corinthian capital.—There died at Corinth a virgin who was marriageable ; her nurse, according to the custom of the times, placed on her tomb a basket containing those viands most agreeable to her when alive, and in order to preserve them better, covered it with a tile. This basket was by chance placed over the root of an acanthus, now called *branca ursina* ; the plant being pressed by the weight at the time of its putting forth its spring leaves and stems, as they grew up they covered it in so elegant a manner, as to attract the notice of Callimachus as he passed, who was so pleased with the idea and novelty of the figure, that he modelled from it the Corinthian capital ; and left to posterity a proof that art may be benefited by imitating the chance productions of nature. He established besides the proportions, and determined the true admeasurements of the Corinthian order. Callimachus† made for the Temple of Minerva at Athens a lamp of gold, the wick of which was composed of the asbestos : it burned day and night for a year, without being replenished with oil. These economical inventions should never have been forgotten :—but they are renewed at various times by the cunning, to impose

* Vitruvius, lib. iv. cap. 1.

† Pausanias, lib. i. cap. 26.

upon the credulous. Impostors disseminate them among the vulgar, who are ever ready to believe the marvellous. The asbestos * may burn without destroying its substance, but not without the sustenance of oil; and oil, in burning, must be consumed. But what are the perpetual lamps so much celebrated among the learned, and found burning after many centuries in the tombs, but fables? The most trifling knowledge of chemistry is sufficient to prove that they are so. Those who have excavated or opened any sepulchres, have observed a smoke or light, which has soon been extinguished, and this has given rise to the idea of the perpetual sepulchral lamps. These phenomena are observed where there is neither light nor sepulchre; as it is well known that dense and confined air exposed to the atmosphere and dissipated ignites. Callimachus† was not of the first class of sculptors, but he excelled in certain points, and was the first who discovered the method of drilling marble. Such was the fastidiousness of his taste with regard to his own works, that he was generally designated the “sworn enemy of the arts.”

TARCHESIUS AND ARGELIUS.

THESE two architects wrote treatises on architecture, and gave the symmetry of the Corinthian order. The former‡ did not approve of the use of the Doric in

* Pausanias says, that it is owing to the wick of the lamp being made of Carpasian flax, which alone, of all other things, is inconsumable by fire.

† Ibid. lib. i. cap. 26.

‡ Vitruvius, lib. iv. cap. 3.

temples, advising the Corinthian or Ionic as more appropriate. Argelius,* in his book, gives, moreover, a description of an Ionic temple of Esculapius, which is believed to have been built by him at Tralles, in Asia Minor.

ANTISTATES, ANTIMACHIDES, CALLESCHIROS, AND PORINUS.

B.C. 555.

ABOUT the time of Deucalion† a temple to Jupiter was erected in Athens, which after a thousand years fell to ruin. Pisistratus‡ undertook to have another erected, under the title of Jupiter Olympius, and employed these four architects, who proceeded so far with it that Pisistratus was enabled to dedicate it; but at the death of that monarch a variety of changes took place. This building, so magnificent and grand in its design, impressing every one with awe and astonishment, was suspended, and became the work of subsequent ages; many sovereigns attached to the arts took pleasure in embellishing and finishing it. Perseus, king of Macedonia, and Antiochus Epiphanes, nearly four hundred years after|| Pisis-tratus, finished the cell, or grand nave, and placed the columns of the portico; Cossutius, a Roman, being the architect. It became, and with reason, one of the four celebrated marble temples of Greece; the other three were of Diana at Ephesus, Apollo at Miletus, and Ceres at Eleusis§. The Corinthian order prevailed; the

* Vitruvius, preface to lib. vii.

† Pausanias, lib. i. cap. 10.

‡ Vitruvius, preface to lib. vii.

|| Strabo, lib. ix. says Pisistratus left it half finished.

§ Vitruvius, preface to lib. vii.

portico,* octastyle, dipteral, that is with double wings all round, eight columns in front, and ornamented with statues of the Athenian colonies. The interior was surrounded with two orders of columns over each other, and detached from the wall, thus forming interior porticoes, or small naves; the middle was uncovered, according to the custom of the ancients. In the siege that Sylla laid to Athens, this temple was greatly injured, but the allied kings afterwards restored it, at their common expense, with the intention of dedicating it to the genius of Augustus. Titus Livius says, that, among so many temples, this was the only one worthy of a god. The emperor Adrian† enclosed it with a wall, as was usual with the Grecian temples, of half a mile in circumference, ornamented with statues, which the cities of Greece erected to that emperor. The Athenians distinguished themselves by the elevation of a colossal one behind the temple. This enclosure was, besides, decorated by a peristyle 100 poles long, supported by superb marble Corinthian columns, and to this façade were three grand vestibules, which led to the temple. Adrian dedicated it a second time. In it was placed the celebrated statue of Jupiter Olympius, of gold and ivory, peculiar for the exactness of its proportions. The courtiers likewise added four statues

* Vitruvius, lib. iii. cap. 1. Newton, in a note to his translation of this passage in Vitruvius, clearly proves that this temple is described by the author as *decastyle*; and Stuart, in his account, observes, that Vitruvius's own words refute the opinions of most of his commentators, for he describes the temple as a *dipteros*, and as having ten columns in front; and further states, that it had a range of columns round the interior of the cell, and was *hypæthros*. Now, if it had been octastyle, the uncovered part would scarcely have been wider than one intercolumniation of the external portico: whereas the hypæthral aperture was generally equal to three intercolumniations, and two diameters of the columns.

† Pausanias, lib. i. cap. 18.

of the emperor. This grand temple,* the expense of which is calculated at five millions of scudi, now serves as a market for the Turks, who, to shelter themselves from the sun, have planted arbours among the ruins.†

AGAPTOS

WAS the inventor of the porticoes round the square attached to the Greek stadii:‡ for this invention he acquired so much honour, that in every stadium they were afterwards called the porticoes of Agaptos. They served for the horses and chariots that were entered for the course, whence they are improperly called by some the *carceri*, which term belonged to the Roman amphitheatres where the wild beasts were confined.

* These magnificent ruins at present consist of sixteen Corinthian columns, 6 feet 4, and some 6 feet 6 inches in diameter; the length of the temple, as measured by Stuart, upon the upper step, was 354 feet, its breadth 171; and the length of the walls of the peribolus, from out to out, is 688 feet, and the width 463.

† Milizia evidently supposes the building Stuart calls the Poikile Stoa, was the Temple of Jupiter Olympius; for that is planted, while the latter is without inhabitants.

‡ Pausanias, lib. v. cap. 15.

CLEOETAS.

AN architect and sculptor, who invented the barrier which was erected in the famous grove of Altis,* near Olympia in Elis. Above that part of the stadium where the judges of the games sit was a plain for horse races. It had before it a space called the bar, where all the horses and chariots that were entered on the lists assembled. Where the bar united with the portico of Agaptos, it widened on each side. The figure of these barriers resembled that of a ship's beak, or prow, and was externally decorated with columns and festoons, with a bronze dolphin at top. Each side of the barrier was 400 feet in length, and contained small porticoes for the running horses; from thence they entered by two highly decorated side doors. The chariots and horses were confined by a rope extended across from one end to the other, which kept them within the barrier. In the middle of this inclosure was an altar of rough bricks, which was whitened every olympiad. On it was a bronze eagle, having the wings spread; by means of a spring this was raised so as to be seen by all the spectators; at the same time the dolphin on the beak fell towards the earth, which was the signal for the rope to be removed, when all the competitors in the chariots and on horseback pressed towards the beak, and at one moment entered the lists; the dexterity of the drivers or the swiftness of the horses decided the victory.

Cleoetas became so celebrated for this barrier, that an inscription was placed at the foot of his statue at Athens to this effect:—"Cleoetas, son of Aristocles, who invented the bar at Olympia." Pausanias does not tell us if Cleoetas

* Pausanias, lib. vi. cap. 20.

was, as is probable, the architect of the Stadium. One side was occupied by seats, opposite to which was a round altar, consecrated to a genius who frightened horses, and therefore called *Taraxippos*. Many fables were invented concerning the origin and the effects of this strange demon. The other side was on the declivity of a hill. A more full account of this Stadium, and the beak, is given in the Pausanias of Gedoyn, which the Chevalier Tolard has illustrated by a beautiful design. Pausanias* does not describe very fully the Stadium at Athens; he merely observes that it was in the form of a half-moon, of white marble, and constructed by Herodes Atticus, who exhausted a quarry in Mount Pentelicus for the purpose. It is related, that his father, Atticus, having discovered a treasure, demanded of the emperor Nerva what he was to do with it. “What you please,” was the first answer.† But Atticus representing that it was too great for a private man, the emperor replied, “Abuse thy unexpected gain.” Herodes, the son of this fortunate Atticus, employed the treasure in decorating Athens with superb buildings. He was a polite and literary character, the author of many works now lost, and master of Marcus Aurelius and Lucius Verus.

MANDROCLES.

(B.C. 500)

ACQUIRED a great name from the bridge he constructed across the Thracian Bosphorus, or Straits of Constan-

* Pausanias, lib. i. cap. 19.

† Gibbon's *Decline and Fall of the Roman Empire*, vol. i. p. 72.

tinople, by order of Darius, king of Persia. This bridge was formed of boats so ingeniously and firmly united that the innumerable armies of Persia passed over it from Asia to Europe. To preserve the memory of so singular a work, Mandrocles represented in a picture, the Bosphorus, the bridge, the king of Persia seated on a throne, and the army that passed over it. This picture was preserved in the Temple of Juno at Samos, where Herodotus* saw it, with this inscription,—“Mandrocles, after having constructed a bridge of boats over the Bosphorus, by order of the king Darius, of Persia, dedicated this monument to Juno, which does honour to Samos, his country, and confers glory on the artificer.”

PHEAX, OR PHEACES,

(B. C. 500.)

CONSTRUCTED a number of edifices in Sicily,† and particularly at Agrigentum, where he employed the Carthaginians, taken prisoners by Gelon, in the signal victory he obtained over them. He embellished the city, and made the subterraneous conduits, which were called after his name Pheaces. It is probable, that he erected the famous Temple of Jupiter referred to by Diodorus Siculus,‡ who describes it to have been 340 feet long, 60 feet wide, 120 feet high, and of an admirable construction, with circular pillars without and square within, so large that their circumference was not less than

* Herodotus, lib. iv. cap. 88.

† Diodorus Sic. lib. xi. cap. 2.

‡ Ibid. lib. xiii. cap. 12.

32 feet, and the flutings sufficiently deep to admit of a man standing within them. The remains of these columns are still seen near Agrigentum.

LIBON OF MESSENA

(B. C. 450)

ERECTED the famous Temple of Jupiter, near Pisa, or Olympia in Peloponessus, where the Olympic games were celebrated every fourth year. This temple* was of the Doric order, 230 feet long, 95 feet wide, and 68 feet high, surrounded by a number of columns, and covered with marble cut in the form of tiles, the use of which was invented by the sculptor Byzas of Naxos, almost two hundred years before. Within the temple was the statue of Jupiter, wrought by the renowned Phidias in gold and ivory; it was 60 feet high, and, though in a sitting posture, almost touched the ceiling—so that had the statue wished to rise, he must have carried the roof away with him. The pediment in front, as well as that at the back of the temple, was ornamented with sculpture; the interior was of two orders of columns supporting lofty galleries; through these was a passage to the throne of Jove, glittering with gold and gems, surrounded by an inclosure, on which were painted historical subjects. On the most elevated part of the throne, above the head of the statue, Phidias represented the Graces on one side, and the Hours on the other. The latter were the three daughters of Jupiter, and, according to Homer, guardians

* Pausanias, lib. v. cap. 10.

of heaven. The pedestal of the statue was of gold, ornamented with a number of deities in basso-relievo. Jupiter was crowned with olive: his right hand held a victory of gold and ivory, adorned with a fillet or crown; in his left was a golden sceptre, of exquisite workmanship, on the top of which was an eagle: the sandals and mantle of the god were also of the same metal, the latter sculptured with every kind of animal and flower: among these, the most predominant was the lily. It was enriched further by a collection of paintings, metals of every kind, gems, ivory, ebony, and productions from the animal and vegetable world.

“ Phidias, the son of Charmidas, an Athenian, made me,” was the inscription at the foot of Jupiter. Pausanias * observes, that the sculptor having prayed the god to give him some proof of his approbation, a thunderbolt fell in the temple, which was considered by the ancients a fortunate omen.

The situation of the temple being marshy, the ivory was preserved from damp by oil frequently poured upon it, from a fountain placed on the pavement contiguous to the statue. A different practice was adopted in the citadel of Athens, which was a dry situation; water was there used to preserve the statue of the Virgin, or Minerva, from becoming too dry. In Epidaurus, to preserve the statue of Esculapius, without the continual trouble of obtaining oil or water, the throne was placed over a well. Besides the Temple of Jupiter Olympius, † there was that of Juno, likewise of the Doric order, 63 feet long, surrounded with columns, one of which, situated at the back part of the temple, was of oak. The architect Libon, if he built this temple, had no doubt some motive for placing this oak column amidst those of marble. Sixteen matrons were constantly employed in

* Pausanias, lib. v. cap. 11.

† Ibid. lib. v. cap. 16.

embroidering a veil, which was dedicated to the goddess every fifth year, when games were celebrated in which none but virgins were permitted to run ; they were divided into three classes, the first consisting of children, the second of girls, the third of young women. They were clothed in vests, which came to the knees, and were open at the breast ; their hair was flowing. The matrons, with other associates, presided. The conquerors were crowned with olive, and had a portion of the calf sacrificed to Juno, and their picture hung up in the temple to perpetuate the memory of their glory. In front of the temple was a wood of olives, within which was the stadium, or place for the athletic exercises. It is well known that the Greeks and Romans made these places of great importance.

CHAPTER II.

FROM THE TIME OF PERICLES TO THAT
OF ALEXANDER.

450 TO 300 B.C.

It was under Pericles* that the Athenians became as celebrated for the magnificence of their edifices,† and for excellence in the other arts, as they had formerly been for their warlike exploits. Athens was the depository of those public treasures, contributed by all the cities of Greece, for the maintenance of the armies and fleet employed against the common enemy, the Persians. Pericles, by his eloquence and rare talents, acquired almost regal authority in the republic; and, after providing for the security of Greece, instead of engaging in destructive and expensive wars, employed the remainder in embellishing his native country. He inspired the Athenians with a taste for the fine arts; and excited so much emulation among eminent artists of all kinds, that each, intent on

* Plutarch, Life of Pericles.

† Most of the mighty structures of the ancients, which have excited our astonishment, and now serve us for models in the practice of our art, were erected in the space of about three centuries, commencing with the year 600 B.C., when the Temples of Jupiter at Olympia and in the Capitol at Rome, those at Samos, Priene, Ephesus, and Magnesia, were begun, to the time when, under Pericles, the ornamental style of Grecian architecture attained its perfection in the Temple of Minerva in the Acropolis, built after the model of that of Jupiter in Olympia; and, finally, the Temple of Diana at Ephesus, in the time of Alexander, completed this first period. — See *Ionian Antiquities*.

immortalising his name, was emulous to excel by greatness of design and by excellence in execution.

Phidias was selected as superintendent of these edifices, although Athens then possessed a multitude of architects; he established a grand and sublime style in sculpture, which extended to painting. Apelles added the graces; the style which afterwards succeeded, gradually declined till the time of Justinian. The same may be said of architecture. It is remarkable that, notwithstanding the precipitation with which the buildings were constructed, their solidity was so great, that more than six centuries after they possessed a grace and freshness which time had not been able to efface. Many extraordinary remains still exist. One of the greatest works of Pericles was the Pireus, the port of Athens, about six miles distance from the city. Themistocles, to save the Athenians from the fury of the Persians, formed this port, and equipped a fleet, with which he performed those wonders Greece has so much exaggerated in history. Pericles enlarged this port, which was at a sufficient distance to preserve the city from being annoyed by the lower order of mariners; surrounded it with edifices, and embellished it in such a manner, that it almost formed another city, and was united to Athens by its buildings and the great wall, which served as a defence.

We have hitherto considered Pericles only as the promoter of great works in architecture — we may now speak of him as an architect. By continually observing the erection of so many works, by conversing with the most able architects, and from the instructions of his great friend Anaxagoras, a philosopher of the first rank, and president of architecture, he acquired that science. The design of the Odeum is attributed to him. This building, where the musicians assembled to rival each other, was called Odeum, because principally destined to give delight to the ear. It was near the theatre. Its figure was

elliptical; a part was constructed on the rock, and part with large stones, cut to the form of a diamond. It was surrounded by a colonnade, except to the south, where it was inclosed to shelter the audience from the sun. Within were seats of marble; but it differed from the theatres in this respect, being covered with a roof formed of the masts and sails of the vessels taken from the Persians, and terminating in a point, in imitation of the tent of Xerxes. It was injured in the siege that Sylla laid to Athens; but Ariobarzanes Philopater, king of Cappadocia, about 700 years after the foundation of Rome, repaired it, and employed three architects, Caius Mutius and Marcus Stallio, Romans, and Menalippus, who was supposed to be a Greek.

HIPPODAMUS OF MILETUS,

DURING the Peloponesian war, built the port of Athens; but the great work of this famous architect was the city of Rhodes, * one of the most conspicuous of antiquity. It was disposed in the form of an amphitheatre, ornamented with magnificent buildings, ample streets, squares, walks, and groves. There were temples for all the gods of paganism: † among the number, that of the Sun, called Haleium, was considered the finest. That of Bacchus was enriched with a prodigious number of pictures of the school of the celebrated Protogenes. Those of Isis of Ocridione and of Diana ‡ were masterpieces of architecture. Pliny || says, that in his time Rhodes possessed more than three thousand statues, the greater part finely

* Strabo, lib. xiv.

† Dio Chrysostomus in Rhodiac.

‡ Suetonius.

|| Pliny, lib. xxxiv. cap. 7.

executed, with other works of art, of more value than all those contained in the cities of Greece. Here was the wonderful Colossus made in three years by Chares of Lindus, a disciple of Lysippus.

ICTINUS AND CALLICRATES

WERE employed by Pericles* to erect a temple to Minerva, called Parthenon,† or Virgin, within the citadel, in the most elevated part of Athens. The two artists‡ exerted all their power to make this temple worthy of the goddess who presided over the arts. The plan was a rectangle, like most of the Grecian and Roman: its length from east to west was 227 feet 7 inches, and its width 101 feet 2 inches, as measured on the top step. It was peripteral, octastyle, that is, surrounded by a portico of columns, with eight to each façade. || The ascent to this portico was by three steps, each 2 feet 3 inches and a half wide, and 1 foot 8 inches and a quarter high. It appears that the Greeks proportioned the height of their steps to the size of their temples. That of Theseus, which was half the size of the above, had the steps also half their height. On these were isolated columns of the Doric order, without any base, forming the portico, the Greeks never giving one to this order. It appears that the steps were intended

* Plutarch, Life of Pericles.

† This temple was very accurately measured by Stuart and Revett, and is given in the *Antiquities of Athens*.

‡ Vitruvius, pref. lib. vii.

|| It had seventeen columns on each flank, including those at the angles, so that it agreed with Vitruvius's precept in having one more column in flank than double those of the front.

for that purpose. The height of the columns* was 34 feet 2 inches 8-tenths, and their greatest diameter 6 feet 1 inch 8-tenths, or from axis to axis 6 feet 2·72 inches, so that their height was equal (nearly) to six diameters. This is the second state of the Doric proportion with the Greeks; and it thus continued till the time the Romans conquered the country, as we shall see hereafter. Within the outer porticoes, of which we have made mention, was a second, also formed by isolated columns,† but elevated two steps higher than the first; from thence the cell was entered, which was dark, as was customary among the Greeks, not receiving any other light than from the doors. It was surrounded within by two orders of columns,‡ isolated

* Each column was composed of twelve courses or blocks of marble; and the bed of each has two circles described upon it: the outer one 9 inches from the edge; the inner circle is about 20 inches diameter. Between these two circles the marble is not polished, is left rough from the chisel, and a little sunk to hold the mortar. In the centre is a hole 5 inches and a half square, sunk three inches. In these were inserted pieces of wood, 6 inches long, for the purpose of keeping the blocks in their places. The whole column diminishes about 1 foot 4 inches, and has 20 flutes. The entasis is very observable.

† These columns are only 5 feet 6 inches 5-tenths diameter, and 30 feet 8 inches 8-tenths high. They are placed before, and not between the antæ, and are what Vitruvius calls (lib. iv. cap. 7) being placed on the shoulders of the pronaos.

‡ The transverse walls terminating the pronaos and posticus receded 12 feet behind the columns of the interior range, and doors were left in them to approach the cell. Between the posticus and the cell, the *opisthodomus* was situated, 62 feet 6 inches wide, and 42 feet 10 inches deep. A wall, 6 feet 10 inches thick, separated this from the cell, equal in width, and 98 feet 7 inches in length. The latter, according to Stuart, had two interior ranges of columns, dividing it into three aisles. The pavement, 15 feet 2 inches from the walls all round, is a little more than an inch above that of the middle; and on the edge of this little step are still to be seen distinctly traced circles, 2 feet 1 inch in diameter, and 8 feet 4 inches from centre to centre; but as these occur occasionally over the joints of the pavement, they cannot be the original situations of

and over each other. Here was the famous statue of Minerva, executed by Phidias,* of gold and ivory, in a standing position, attired in long vestments, with a spear in her hand, on her helmet a sphinx, supported by two griffins; on her breast the head of Medusa, of ivory; at her feet the ægis: the pedestal was ornamented with a basso-relievo representing Pandora, and at the side a statue of Victory, 4 cubits high. The whole of the temple was of white marble, and could be seen from an immense distance. On a nearer approach, it was admirable for the elegance of its proportions, and the beauty of the basso-relievos with which its exterior was decorated. The capitals of the columns consisted but of few members, and without an astragal; the ovolo had so little projection that it did not conceal any part of the capital: the abacus was without a cyma, which would have seemed trifling in so majestic an order. After this style are the capitals of the columns at St. Peter's in Vincoli at Rome, and some in the Villa Adriana at Tivoli. The entablatures† were a third of the height of the columns. The

the column, but probably those mentioned by Wheeler as supporting galleries. There are other indications of circles 3 feet 4 inches diameter; one of which, at the north-east angle of the sunk pavement, is very evident, and in the middle of the stone. The raised pavement may have been a covered aisle, and the sunk part probably open to the air, thus constituting an hypæthral temple.

In the *opisthodomus* there are four stones, 5 feet 8 inches by 5 feet 10 inches, in the pavement 14 inches thick, which have circles 4 feet diameter indicated upon them. Over these were placed the columns that supported the roof. The clear width between these stones, from north to south, is 17 feet, and from east to west 10 feet. In the other part of the pavement the stones are much smaller, and only 9 inches thick.

* Pliny, lib. xxxvi. cap. 5, says the statue was 26 cubits high.

† The whole entablature is 12 feet 2 inches high. In the architrave triangular holes have been sunk under each metope, probably to attach shields, as Pausanias, lib. v. cap. 10, describes at the Temple of

frieze was ornamented in the metopes with basso-relievos, representing the combats of the Athenians against the Centaurs, but well relieved, as they were calculated to be seen from some distance. It is observable that the metopes were made higher than wide, that they might appear square when viewed from below. Surely this is a proof that the ancients understood optics and perspective. Whilst *Æschylus*, the reformer of the théâtre, represented at Athens the tragedies composed by him, *Agatharcos*, who painted the scenes, wrote a treatise on perspective. *Democritus* and *Anaxagoras* afterwards illustrated the subject by various writings. It is remarkable, that in this temple, as in all others of the Doric, the Greeks placed triglyphs at the angles, and not the half of a metope, as was the practice of the Romans. It is more consistent that the triglyph, which represents the cross beams, should be so placed: but by this arrangement the intercolumniation* at the angles became smaller.

The pediment was low,† as usual among the Greeks; it

Jupiter at Olympia. The architrave extends from column to column, and is composed of three thicknesses of marble, shewing two joints in the soffite. The frieze is admirably contrived to save both materials and labour. The triglyphs are each out of a single block, being 3 feet wide and only 2 feet three inches, or thereabouts, in thickness. At each end, in front, a groove is formed, about an inch and a half deep, into which the sculptured metopes are slipt; these in front measure between the triglyphs 4 feet 3·15 inches, (excepting the one nearest the angle, which is 4 feet 0·15 inches,) and at the back only 2 feet 10 inches; so that there is a hollow space from 8 to 14 inches at the back and sides of the metopes and triglyphs. A metal cramp, 2 feet long, in form of an H, holds the metope to the back of the frieze, and they are attached to the triglyphs by another, 1 foot 5 inches long on each side. The cornice is of one thickness; the angular block covers two mutules; each of the other, one space and a mutule.

* The first intercolumniation is 5 feet 8 inches 8-tenths, and all the others 7 feet 11 inches 5-tenths.

† Acroteria were placed at the angles of the pediments, on which were placed, probably, bronze ornaments. *Pausanias*, lib. xi. cap. 3, says, at the Temple of Jupiter in Olympia they had vases of gilt metal.

had no mutules under the soffite of the level cornice; at each angle were the heads of lions, to carry off the water.

In the tympanum of the pediment were groups of figures wholly detached, the subject of which was the birth of Minerva; to these were afterwards added those of Adrian and the empress Sabina. In that of the posticus was the combat of Minerva and Neptune. These pediments are called eagles by Pausanias,* perhaps from their resemblance to the wings of that bird in the act of taking flight. On the polished walls of the cell was externally a sculptured frieze,† significant of the sacrifices and processions

* Lib. i. cap. 24.

† This frieze was 3 feet 4 inches high, and continued round the walls of the cell a length of 520 feet. The subject represented was the Panathenian festival, and consisted of figures of both sexes, and of every age; priests, charioteers, horsemen, cattle, victors, youths, maidens, gods, heroes, &c. Guttæ were introduced on the architrave under this frieze, although the triglyphs were omitted. The walk round the temple, between the columns and the walls of the cell, was covered by marble lacunaria, but these were disposed at equal distances, and without reference to the situations of the columns, the beams not resting always over them. The pavement of this peristyle was formed of slabs of marble the whole width, and about 4 feet 10 inches wide.

The courses that form the walls of the cell are laid without cement, and are fastened together by cramps of metal run with lead. Each bond stone has four of these cramps, about 10 inches long, and in form of an H, the two ends being 4 inches wide; these are sunk into the marble about 3 inches. There are also upright plates of metal 6 inches high; 4 inches wide, and a quarter of an inch thick, that serve to confine the bond stones.

Every part of the masonry is constructed with the greatest care and attention; the beds and ends of the marble are highly polished, and frequently the joints are so close that they are scarcely visible. The marble generally appears to be of one quality, and, where recently fractured, has the appearance of the finest lump sugar. The lowest course consists of two stretchers, 8 feet long and 3 feet 9½ inches high, with a space of from 2 to 5 inches between them. The next is a course of bond stones, running through the whole wall, 3 feet 10 inches and 3-tenths thick, and is, as well as the courses above, 1 foot 4½ inches high, and 4 feet long.

Some of the members of the cornice were gilt; a fret, with a honey-

of the ancient Athenians. Ictinus, and Carpion, who was also most probably one of the architects of this temple, gave a description of it, according to the custom of the Greek architects. This renowned edifice was preserved entire till 1677, when, in the siege laid to Athens by Morosini, a bomb fell, which set fire to some powder placed there by the Turks, and exploding in a great measure destroyed it. The Venetians took down the sculptures of the pediment,* but in displacing them they unfortunately fell to the ground, and were entirely broken. The ruins of the temple still remain, and in the centre the Turks have erected a mosque, covered with a low cupola.

Ictinus was also the architect of the famous Doric Temple of Ceres† and Proserpine in Eleusis; but he only built the cell, which was without exterior columns, and of an immense size, capable of containing thirty thousand persons, since as many were present in the noisy Eleusinian ceremonies. St. Peter's can only contain half the number.

Plutarch‡ says, that the first architect was Correbus, to whom succeeded Metagenes, who erected the second order; Zenocles then raised the cupola which covered the sanctuary.

Ictinus erected temples in many other places; among which the most remarkable was that of Apollo, called *the*

suckle under, is still to be seen, painted on the west front. This mode of decoration is not unusual in Grecian buildings; the marble was frequently painted or gilt, which must have destroyed that simplicity of style we so much admire.

* A great portion of this sculpture was rescued from the ruins by the Earl of Elgin, and sent to this country; it is now, by the liberality of our government, preserved in the British Museum.

† There are scarcely any vestiges of this temple. See *Ionian Antiquities*.

‡ Life of Pericles.

Helper,* near Mount Cotyion in Arcadia, in the Peloponnesus. It passed for one of the finest of antiquity, and was vaulted with stone. The ancients sometimes used bricks; not from a scarcity of marble, or from parsimony, but for the purpose of giving a greater firmness to their buildings: these were encrusted with marble, to appear more beautiful.

MENISICLES, OR MNESICLES,

DESIGNED, by order of Pericles,† the famous *Propylea*, or that magnificent portico which served as an entrance and façade to the citadel of Athens. The whole was of white marble, with columns of the Doric order.‡ It

* Pausanias, lib. viii. cap. 41. "Ictinus, the architect of the temple at Phigalia, was cotemporary with Pericles, and built the Parthenon for the Athenians." The ruins of this temple still remain, on a lofty hill, in a beautiful situation, and commanding two sea views. Most of the columns of the peristyle, with the architrave above, are standing, and form a picturesque ruin.

† Plutarch, Life of Pericles.

‡ The Propylea was commenced about 437 years before Christ, and cost nearly half a million sterling. Each front had a Doric hexastyle portico, raised upon three steps: the columns were nearly 5 feet diameter, and 29 feet high, including the capital. From the west front you entered a vestibule 59 feet 2 inches wide, which was divided into three aisles by six Ionic columns, three on each side; these supported a marble ceiling (see Pausanias, lib. i. cap. 22) divided into lacunaria; these lacunaria are formed of blocks 22 feet long, and extended from the walls to the columns; some of them remain. The wall at the end of the vestibule had five openings, in which were hung the gates of the Acropolis; the central one is much the widest. The eastern portico, to which there was an ascent by five steps, was entered through these gates: from hence there was a descent of three steps to the level

had five gates, that in the centre being the largest, with an interior vestibule ornamented with Ionic columns; from what remains, it may be inferred they were placed on a stylobate. The façade was ornamented with equestrian statues on isolated pedestals.

Among the various artificers who worked at this edifice was a slave named Splanchnoptes,* a favourite of Pericles, who fell from the building; Pericles cured his wounds and contusions with the herb *parietaria*, the properties of which were not then known to the Athenians. The crafty Pericles pretended that the goddess Minerva had revealed to him the efficacy of this herb. In gratitude for this benefit, the Athenians employed Phidias to make a statue of gold and ivory, which they dedicated to Minerva Medica; and also another statue in bronze to Splanchnoptes, as being the occasion of so useful a discovery.

At this time Greece abounded with treatises on architecture. The architects, as has been observed, were accustomed to give descriptions of the edifices on which they had been employed. Silenus gave the proportions of the Doric; Pythius wrote on the Temple of Minerva, erected by him, of the Ionic order, at Priene, now Palazzo, in Ionia; Nymphodorus and Dephilus, (so dilatory in his work that it became a proverb, "more tardy than Dephilus,") Charidas, Phyros, Agasistrates, Mexaris, Teocides, Demophilus, Poclis, Leonides, Silanion, Melampus, Sarnacus Euphranor,† were all architects, and wrote on that science; but their works, as well as those of many others, are unfortunately lost. Printing may preserve ours from this misfortune.

of the ground before the interior front. Among the ruins may be observed some of the members of the cornice, which were gilt, and other parts painted with a reddish ochre.

* Pliny, lib. xxii. cap. 17.

† Vitruvius, lib. i. cap. 1; lib. vii. preface; lib. x. cap. 19.

POLYCLETES, OR POLYCLETUS,

B. C. 420,

A sculptor and architect of Argos. He built a rotunda of white marble at Epidaurus, which, says Pausanias,* merits attention; also the theatre, which, according to the same author, “is of singular beauty. The theatres of Rome surpass all others in magnificence and ornament, as well as in size, without excepting that of Megalopolis, near Arcadia; but for elegance and symmetry, that of Polycletes may dispute the palm.” It is to be regretted that Pausanias did not leave a more full account of these magnificent works, instead of being so diffuse on the genealogy of Theseus, Hercules, and other heroes.

DEMETRIUS, PEONIUS, DAPHNIS.

ABOUT the same time the Temple of Diana† at Ephesus was completed by Peonius, and Demetrius, a priest of Diana, Peonius of Ephesus, and Daphnis a Milesian, built in the city of Miletus‡ another temple consecrated to Apollo,|| entirely of marble, and of the Ionic order,

* Lib. ii. cap. 27.

† Vitruvius, pref. lib. vii.

‡ Strabo.

|| The Temple of Apollo Didymæus, 22½ miles from Miletus. With what magnificence and prodigious spirit this new edifice was designed, may in some measure be collected from the present remains. Strabo has termed it “the greatest of all temples;” adding, “it continued without

the grandest and most magnificent work of which the cities of Greece can boast. It is to be observed, that the Greeks did not use any plinth under the base of the Ionic or Corinthian column, nor any base under the Doric. The Romans made this addition, and afterwards introduced them in Greece, under the emperors.

PYRHUS, LACRATES, AND HERMON.

PYRHUS, or Pyrrus, with his two sons, constructed in Olympia,* for the Epidamnians, an edifice called the

a roof, on account of its bigness." Pausanias mentions it as unfinished, but as one of the wonders peculiar to Ionia; and Vitruvius numbers it among the four temples which had raised their architects to the summit of renown. The plan of this temple was a parallelogram, 303 feet 6 inches in length, by 164 feet 5 inches in width, measured upon the upper step. The cella is surrounded by a double row of columns, the outer peristyle having 21 in the sides, and 10 in each front. The walls within the cella are divided into compartments, by pilasters placed at equal distances all round, excepting at the entrances, where there are two semi-columns of the Corinthian order. There was only one entrance through the pronaos at the east end, which was of considerable depth. The wall of the cella in the back front is 8 feet 10 inches in thickness. The columns of the inner peristyle have 24 flutes the whole length of their shafts, but those of the external range only to a distance of 2 feet below their capitals, the rest of their shafts being left rough. The height of the three steps is 5 feet; the height of the column, including capital and base, is 63 feet 1 inch 6-tenths: their lower diameter 6 feet 3 inches 2-tenths, and upper ditto 5 feet 5 inches 8-tenths; the architrave is 3 feet 5 inches 2-tenths high: no part of the cornice can be now discovered. The columns are more than nine and a half diameters high, and the architrave not deep enough; great defects not to be reconciled to the exquisite finish of all the parts. — *Ionian Antiquities*.

* Pausanias, lib. vi. cap. 19.

treasury, where Theocles raised two statues of cedar, one representing Hercules approaching the garden of the Hesperides, and the other, Atlas supporting the heavens.

POTHOEUS, ANTIPHILUS, AND MEGACLES,

ERECTED in the same city of Olympia,* for the Carthaginians, another treasury, where was an altar and a beautiful statue of Jove, and some spoils acquired by the Carthaginians from the Syracusans. It is probable that these treasuries were small votive temples, erected in Olympia by divers nations or illustrious persons, for some victory or other fortunate event, having trophies and statues placed in them.

SATYRUS AND PYTHEUS

MADE the designs, and had the conducting of the superb tomb which the queen Artemisia,† perhaps more from vanity than grief, erected in Halicarnassus, to the memory of her husband Mausolus, king of Caria. These architects left a description of, and established the rules for such sort of monuments. The tomb has been considered one of the seven wonders of the world, for its size and the beauty of the architecture, as well as the quantity and excellence of the ornaments. Its celebrity has given the

* Pausanias, lib. vi. cap. 19.

† Vitruvius, preface to book vii.

name of Mausoleum to all others that in any way resemble it. Mausolus,* king of Caria, having observed in Halicarnassus a situation on the sea-shore, in the form of a theatre, convenient for commerce, and naturally fortified, erected a palace there for his residence. It was constructed of brick, for greater strength, and stuccoed smooth as glass; the exterior ornaments were of Proconesian marble. Near to the port was the great square, which on one side had the royal palace, and on the other the fortress, with the Temple of Mars, containing a colossal statue, the work of the excellent Telocaris and Timotheus; in another part, the Temple of Venus and Mercury, with the fountain of Salmacides, the waters of which, says the fable, caused those who drank of them to become enamoured. In the centre of this noble square was the Mausoleum, the circumference of which was 411 feet; the sides from north to south measured each 63 feet; the other two façades were longer. To these façades, for ornament, were attached thirty-six columns set in the walls, and a number of statues of surprising workmanship. The execution of the ornaments on the eastern side was confided to the famous Scopas, those on the south to Timotheus, the west to Leocares, and the north to Bryaxes. The work of these skilful sculptors greatly augmented the reputation they had already acquired; but what gave the greatest renown to this structure, was the pyramid which was raised under the direction of the ingenious architect Phyteus. This was composed of twenty-four steps; its top was crowned with a car drawn by four horses abreast, representing the chariot of the Sun; therefore its elevated situation was not improper. The whole was built of the most beautiful Grecian marble, and was 140 feet high. Fischer, in his treatise on historical architecture, gives both the description and design of it.

* Pliny, lib. xxxvi. cap. 6.

Phyteus* also built in Priene, now Palazzo, a temple to Minerva Polias,† of the Doric order; the remains‡ are still to be seen. The Ionic base is according to the description of Vitruvius.||

* Vitruvius, lib. i. cap. 1.

† Pausanias, lib. vii. cap. 5.

‡ The Temple of *Minerva Polias*, although prostrate, is one of the remains of Ionian elegance and grandeur too considerable to be hastily or slightly examined. When entire, it overlooked the city, which was seated on the side of a mountain, on terraces cut out of the slope, descending in gradation to the edge of the plain. The communication from one terrace to another was by steps, cut in the solid rock, many of which are still remaining. The temple was surrounded by a *peribolus*, the entrance to which was through a *propyleum*, or gateway, and most probably the *peribolus* was surrounded within by porticoes. The plan of the temple is a parallelogram, 122 feet 6 inches by 64 feet 3 inches, measured on the upper step. There were eleven columns in the flanks, and six in the fronts of the temple. The walls of the cella ranged with the columns, and enclosed an area of 65 feet by 30 feet 9 inches; they are 4 feet in thickness.

The Ionic columns have bases raised on plinths, differing from the usual Greek mode. The columns are 4 feet 3 inches in diameter, and the intervals somewhat more than 7 feet 4 inches. The capitals of the angular columns shew a similar face in both fronts; the height of the column is not ascertained; the architrave was in height 3 feet 3.75 inches; the frieze, including the lower member of the cornice, 2 feet 7 inches 7-tenths, and the cornice on the flank 3 feet 4 inches 7-tenths; the upper diameter of the column 3 feet 6 inches 4-tenths.

There are other remains at Priene, near this temple, as an agora, a stadium, &c., all constructed with the marble of the mountain, which is of a greyish tint.—*Ionian Antiquities*.

|| Pytheus describes this temple in a written exposition; and it is recorded, he conceived so highly of his profession, as to assert in his commentaries, that it behoved an architect to excel more in all arts and sciences, than even the individuals who had carried each by their application and industry to the summit of reputation.

SCOPAS

WAS of Paros, * an island in the Egean Sea, a sculptor of the first class, as well as an eminent architect. He rebuilt, at Tegea, the Temple of Diana, called Alea, from Aleos, king of Arcadia, who caused it to be erected the first time. It was the most sumptuous of Peloponnesus, and was composed of three orders, Doric, Ionic, and Corinthian; but how arranged, it is not known. Pausanias† says, that the exterior was Ionic, and the interior, Doric and Corinthian.

PHILON, OR PHILO,

ONE of the most celebrated architects of his time, was commissioned by Demetrius of Phaleres, 330 years before Christ, to enlarge the ports and arsenal of the Pireus.‡ He succeeded so well in his undertaking, and in giving an account in the public assembly of what he had done, expressed himself with so much eloquence, purity, and precision, that the people of Athens, who were excellent judges in such matters, pronounced him equally a fluent orator and admirable architect. He erected various temples,|| and made *prostylos* the temple of Ceres and Proserpine, built by Ictinus, placing only columns in the

* Pausanias, lib. viii. cap. 45.

† Within the enclosure were galleries, probably supported by Doric and Corinthian columns, surrounding the hypæthros.

‡ Plutarch, Life of Sylla.

|| Vitruvius, preface to book vii.

front. By thus enlarging the vestibule, he not only added to the convenience of the initiated, but also to the majesty of the building. Philon, moreover, gave a design for, and commenced the theatre at Athens, which was afterwards finished by Ariobarzanes, and again rebuilt by Adrian. This theatre* was entirely of white marble; its greatest diameter was 248 feet, and that of the orchestra 117 feet. The Athenians used their theatres not only for tragic and comic representations, but also for their deliberations on public affairs. The remains shew the origin of this sort of edifices, and give an idea of the principal embellishments, which afterwards became still more redundant. Its steps in great part rest on the natural rock of the citadel, not having any other support. The theatre at Sparta is arranged in the same manner; as also that of Argos, in which the steps were cut in the hollow of the mountain. The Greeks improved this arrangement, but the Romans surpassed them in magnificence, making their theatres isolated, with colonnades on the upper step, for the convenience of the females, a custom which did not belong to the Greeks. Philon left exact descriptions of all his buildings, which were much esteemed, but they are now lost. Some suppose that this Philon was the same with Philones of Byzantium, who composed a treatise on warlike machines, which is now printed in the Louvre, and affixed to a manuscript in the library of the king of France.

* Stuart's Athens.

CHAPTER III.

FROM ALEXANDER THE GREAT TO AUGUSTUS.

300 B. C. to the Christian Era.

AT the period when Alexander enriched Greece with the spoils of the various nations he had subjugated, architecture shone in its fullest splendour; it was then introduced into Macedonia, where there still exists an ancient temple, now dedicated to St. Demetrius,* having more than 1,000 columns of the finest marble, jasper, porphyry, &c.; and from thence over the various countries which fell under the dominion of Alexander's successors. The wonders of Balbek and Palmyra,† the venerable ruins of which still remain, may belong to that period; and as their date is uncertain, it is here intended to give a slight sketch of them.

Balbek, anciently called Heliopolis, is by the Arabs reckoned among the wonders of Syria; and even European travellers, enchanted by its superb monuments, have found it difficult to express their admiration.

South of the city, which stands in a delightful plain at the foot of Mount Libanus, are the remains of various buildings, destroyed in latter times, some of the materials of which are now converted into a castle. Among the number is a rotunda built of marble, differing in its arrange-

* Pococke's Description of the East, vol. ii.

† From Wood's Balbek and Palmyra the dimensions in English feet and inches have been taken. Many of these were omitted, or incorrect, in our author.

ment from other buildings, and worthy of a description here. The cell is a circle 32 feet in diameter, and the wall which encloses it is of the same figure within and without. The exterior columns, in height equal to the diameter of the cell, are of the Corinthian order, on a stylobate, but so placed as to give a novel and peculiar character to the temple. An octagon is first set out, and at each of six points of the figure is placed a column 3 feet 1 inch in diameter, with a semicircular or concave entablature and stylobate connecting them; these columns are 9 feet from the face of the pilasters which are attached to the cell. The other three sides of the octagonal figure are cut off, for the purpose of attaching a tetrastyle portico, 50 feet in length, to form a façade. The outer intercolumniations are 8 feet 8 inches, the middle one being considerably the widest. The extreme columns of this portico complete five sides of the octagon. The spaces between the capitals of the pilasters round the cell are ornamented with festoons of flowers, held by boys, and between every two pilasters is an hemispherical-headed niche; of these there are five, which have contained statues. The doorway is 13 feet wide, and has the cornice of its entablature level with the astragal of the capitals; it is opposite to the middle intercolumniation, and is approached by twenty-one steps. The floor of the interior of the cell is level with the top of the stylobate; and within is an entablature, level with and resembling in all respects that of the exterior, having a swelled frieze, a cornice, with dentils, modillions, &c. A part of the stone dome remains above this. Around the lower part of the cell is a continued circle of fourteen detached Ionic columns, with a proper entablature. Above this are five tabernacles, each formed of two Corinthian columns on a pedestal; the entablatures have small pediments alternately circular and angular. Between these tabernacles are single isolated columns, with a portion of an entablature over them:

these columns, as well as those which form the tabernacles, are placed immediately over the Ionic below. The stylobate of the exterior is about 12 feet high; the whole order above 39 feet; the interior stylobate is 5 feet 6 inches high, and the Ionic order 12 feet; the shafts of the columns, as well without as within, are of one piece; and above the Ionic order of the interior is a modern roof, the lower part of the building being converted into a Greek church. One remark may be made upon the original dome,—that here it evidently springs from the wall of the cell, and it seems probable that a statue was placed over each column on the outside.

One temple, which by a species of miracle has resisted the injuries of time, is almost entire. Its plan is rectangular, and its length, measured on the face of the columns, is 222 feet, and 114 feet 7 inches in breadth. The vestibule occupied about 50 feet, and, with one of the principal sides, is now in ruins. The whole body of the temple is surrounded by a superb peristyle of Corinthian columns, which, with their entablature, and a plinth 1 foot 9 inches high, is 76 feet in height; their diameter is 6 feet 5 inches, and each is composed of three stones. The middle intercolumniation is 11 feet 6 inches, the others of the façade 8 feet 6 inches, and those at the flank 9 feet; the columns are distant from the wall of the cell about 9 feet 9 inches. Each side has fifteen columns, and each façade eight, including those at the angles; but it should be observed that the principal front has a double file. The architrave, frieze, and cornice, are of exquisite workmanship. In the soffite round the temple are the figures of gods, goddesses, and heroes, in a style by no means inferior to the rest of the work. The stylobate, 16 feet 6 inches high, is ornamented with a species of double frieze, in which are represented certain mysteries and ceremonies of paganism, with a wonderful variety of men and animals. The ascent to the portico is by thirty

steps, flanked by two walls, which are terminated so as to form pedestals. Behind the double file of eight columns which forms the portico, over which is a proportionate pediment, are four other columns, and then two pilasters of three sides, which advance from the body and terminate the walls of the cell; thus forming a spacious entrance. The jambs of the doors are of marble, richly sculptured, and the soffite of the architrave is ornamented with a large eagle in bas-relief, having its wings spread, and holding a caduceus in its talons: on each side is a cupid, supporting the end of a festoon of flowers, which hangs from the beak of the eagle; this is considered a fine piece of sculpture. The height of the door is 43 feet, its width 21. The interior of the temple now consists of a nave and two side aisles, resembling our churches, formed by two rows of fluted Corinthian columns,* 3 or 4 feet in diameter. On each of the side walls are six half columns, 4 feet 1 inch in diameter, and distant about 9 feet 4 inches from each other, forming seven compartments; they support a salient entablature; their bases rest on a stylobate 10 feet high, the bottom of which is level with the pavement of the outer portico. Each of these compartments, before mentioned, has a recess with an arched head, 15 feet high, a small tabernacle with Corinthian columns, and a triangular pediment, with other embellishments in marble over it. Towards the western extremity of the great nave is an ascent by thirteen steps to a species of choir, separated from the rest of the temple by two large pilasters, forming a magnificent division, and corresponding in style with the other parts. The same architecture is continued throughout the choir, with the difference only, that the pilasters are without pedestals, and the recesses descend to the pavement. At this end was

* These two rows of columns are supposed by Mr. Wood not to have been original, and are omitted in his plan of the temple.

placed the principal divinity. The whole of this portion of the temple is ornamented with festoons, birds, flowers, fruits, tritons, fish, and marine gods, admirably sculptured. The roof is a bold and daring effort, divided into compartments, ornamented with sculpture; it is open in the centre, but we cannot say whether so originally. The whole is supported by large vaults, which probably formed a subterraneous temple. There are still sufficient vestiges to prove its having formerly been surrounded by a number of superb edifices. Among these are the ruins of a palace, which in magnificence must have equalled any in the world. A large wall enclosed both it and the temple, constructed of such immense stones, that the tradition of the country does not surprise us, which attributes the whole to the agency of some supernatural power. There are three in particular placed near each other, which form together a length of 183 feet, each being more than 60 feet long, 12 wide, and as many deep; and, what is still more extraordinary, they are raised 30 feet from the ground; nor do any of the others differ much in size from them.

The great temple is approached by a flight of fifty-one steps, which conduct to an open portico of twelve columns, in length about 180 feet, and in depth 36 feet 10 inches. At each end of this portico is a room, 38 feet by 31, which gives an additional length to this noble façade. The walls which form these rooms are faced with pilasters, four on each front, and 3 feet and a half on the returns. As the flight of steps does not extend beyond the open portico, a stylobate, 24 feet in height, or level with the top step, is continued at each end; on this is a plinth, 3 feet 6 inches high, on which rests the order, which is 52 feet in height; the diameter of the columns 4 feet 3 inches. The middle intercolumniation is 11 feet 6 inches, that on each side 11 feet, and each of the others 9 feet 6 inches. The height of the entablature is 10 feet 4 inches and a half; the architrave is enriched, the frieze

plain, the cornice has modillions, dentils, &c. Above this entablature is placed an attic, 10 feet in height, with pilasters over those below as well as over the columns. Within this portico and the rooms at the end are two ranges of tabernacles, one above the other: these are interrupted by three doors; the middle one, considerably the largest, being 17 feet wide and 31 feet high; those at each side, or opposite the third intercolumniation from the middle, are but 18 feet high and 10 feet wide. Passing through these, you enter an hexagonal court, two sides of which are considerably longer than the others: the extreme diameter extends as far as the façade of the principal front: the depth from back to front is about 146 feet. There are porticoes built round five sides of this court, adorned with columns, and having tabernacles in two stories on the walls within. Between these porticoes, which are 63 feet long, and which have each four columns, 2 feet 9 inches diameter, placed on pedestals, are other rooms of square and irregular forms, from their being obtained in the angles of the hexagon. Above the order is a similar attic to the one before described on the exterior. Through the side opposite to that entered from the principal front you pass into a large quadrangular court, 374 feet long and 368 feet wide, having similar porticoes around three sides. The order of these two courts is 33 feet 6 inches high, and the frieze is ornamented with festoons of fruit and flowers, suspended from ox-sculls, and small masks between them in bold relief. At the extremity of the quadrangular court is the great temple, nine columns only of which remain with their entablature over them. Originally there were ten in front and nineteen on the flanks, counting the angles twice. The extreme length is 285 feet, the breadth 157 feet; the diameter of the columns 7 feet. The whole height of the order, including the plinth, is 87 feet. The bases are attic; the shafts, which consist of three pieces, plain; the

capitals a beautiful Corinthian. The frieze is ornamented with inverted trusses, with heads and masks over each, and festoons of flowers between them : the cornice is very much enriched.

The Corinthian order predominates every where, and to grandeur of architecture is united the beauty of sculpture, though the latter is often curious in its design. There are innumerable statues, busts, trophies, niches of exquisite workmanship, bas-reliefs, caryatides, termini ; all which once embellished these now melancholy ruins. Beneath these edifices are vaults, formed into halls and large apartments, to which you descend by marble steps, where are tombs of the same material. The walls are encrusted with sculptures and niches, and are built of enormous stones, united without cement. Such are the principal remains of Balbec, which may vie with the most stupendous works of architecture either in Egypt, Athens, or Rome.

Palmyra,* a city of Syria, not far from the Euphrates, called in the sacred writings, and also by the Arabs and Turks, Tadmor of the Desert, offers to the curiosity of the traveller objects equally interesting. It is situated in a vast plain, surrounded on three sides by a long chain of mountains. The air is salubrious, but the soil sterile

* Gibbon's *Decline and Fall of the Roman Empire*, vol. ii. p. 139. Palmyra insensibly increased into an opulent and independent city ; for, being situated between the Gulf of Persia and the Mediterranean, it was frequented by the caravans which conveyed the commodities of India to the nations of Europe in the time of the Romans. Palmyra connected the Roman and Parthian monarchies by the mutual benefits of commerce ; and after the victories of Trajan, this little republic, for 150 years, flourished as a colony to the imperial city. It was during this period, as we learn from many inscriptions, the temples, palaces, and porticoes, were constructed by the wealthy Palmyrenians. These sumptuous buildings were destroyed about A. D. 273, by the emperor Aurelian, when he conquered Zenobia, and plundered the city. Some English travellers, about the end of the seventeenth century, discovered the ruins.

and barren of every kind of plant, except a few palm-trees. The ruins denote it to have been an extensive and ancient city, but it is now reduced to thirty or forty miserable huts, built within a vast court, which formerly contained a magnificent pagan temple. It is enclosed by a wall 74 feet high, each side of which is about 730 feet long: that on the north and south has externally thirty-one Corinthian pilasters, standing on a continued stylobate, and supporting a regular entablature; that on the east has thirty-four similar pilasters: between every two of these is a window, highly decorated. On the west side is a flight of steps and a portico of ten columns, which conducts to the interior of the court. The Turks have destroyed the entablature, but some remaining fragments shew with what exquisite workmanship it was ornamented: two friezes in particular, 35 feet long, are sculptured with vine leaves and grapes, almost equal to nature. In this same court are fifty-eight marble columns, which, with their entablature, measure 59 feet in height. Their number was originally much greater, as they formed a single portico on the west side, and a double one on the other three. In the centre nearly of this court was an octastyle temple, with fifteen columns on the flanks; it measured in length, on the top step, 200 feet, and in width 112 feet. The walk round the cell was very spacious, being 22 feet 2 inches, and the intercolumniation only 9 feet 6 inches. The cell is about 133 feet by 44, and is entered, in a different manner to most temples, on the west or long side, through the sixth intercolumniation, reckoning from the north. There is an outer door opposite to this attached to the columns of the peristyle. The soffite of the inner one was ornamented with an eagle, resembling that at Balbec. The order, including its plinth and entablature, is in height 65 feet; the columns were fluted, and had metal leaves, &c. attached to the drums of the capitals, as the drilled holes indicate.

Of this temple, now used as a mosque, the walls only remain; in which are windows, of a moderate size, rather wider below than above, and very much ornamented with sculpture. In the middle is a cupola 6 feet in diameter, and formed out of one block.

Every part around the enclosure, for the space of a mile, is covered with a confusion of broken columns, but their original destination it is impossible now to determine. A triumphal arch leads to a portico half a mile in length and 40 feet in width, formed by two ranges of marble columns 26 feet high; 129 of these still remain, but there appear to have been at least 560. On the greater number are inscriptions in Greek and Palmyrene characters; whence we may conclude this to have been the most frequented part of the city, and that the pedestals which project from the shafts of the columns supported statues in memory of those who had deserved well of their fellow-citizens. A little distance from the portico are the ruins of an edifice, composed of marble, more beautiful than that of the portico; the columns are 22 feet high and 8 feet 9 inches in circumference. It appears to have been a banqueting hall.

On the other side of the portico are doors, supposed to have communicated with the court of the palace. Two of them are still remaining, and convey to us an idea of their former magnificence; they are ornamented with four porphyry columns, 30 feet high and 9 feet in circumference. An immense number of columns prostrate amidst the fragments of walls, lead us to conjecture that the palace was in front of this, and surrounded by other porticoes.

Opposite to the portico is a forest of marble columns, heaped one on the other, which set imagination at defiance. Amidst this desolation, in a street towards the north, and extending more than a mile, are many marble sepulchres, in the form of high towers, some

of four and others of five stories, which at a distance resemble the ruined steeples of churches.

These ruins sufficiently demonstrate the ancient splendour of Palmyra, and its entire destruction will ever disgrace the page of history. This city was also celebrated for having been the birth-place of those two illustrious personages Zenobia and Longinus.

In Syria was, besides, Hieropolis, or the Holy City, sometimes called Magog, in which was the famous temple dedicated to the great goddess of Syria, surrounded by a court four or five hundred feet in circumference. The architects of all these eminent works are unknown, and we have no very satisfactory accounts of any that flourished in the time of Alexander or his successors.

DINOCRATES,

A skilful and ingenious architect of Macedonia,* who, provided with commendatory letters to the principal persons of Alexander's court, set out from his native country with the hope of gaining, through their means, the favour of the monarch. The courtiers made him promises which they neglected to perform, and framed various excuses to prevent his access to the sovereign; he therefore determined upon the following expedient:—Being of a gigantic and well-proportioned stature, he stripped himself, anointed his body with oil, bound his head with poplar leaves, and throwing a lion's skin across his shoulders, with a club in his hand, presented himself to Alexander, in the place where he held public audience.

* Vitruvius, pref. lib. ii.

Alexander, astonished at his Herculean figure, desired him to approach, demanding, at the same time, his name:—"I am," said he, "a Macedonian architect, and am come to submit to you designs worthy of the fame you have acquired. I have modelled Mount Athos in the form of a giant, holding in his right hand a city, and in his left a shell, from which are discharged into the sea all the rivers collected from the mountain." It was impossible to imagine a scheme more agreeable to Alexander, who asked seriously whether there would be sufficient country round this city to maintain its inhabitants. Dinocrates answered in the negative, and that it would be necessary to supply it by sea. Athos consequently remained a mountain. This city, projected by Dinocrates, might have been furnished with provisions by cultivating the arms, the head, the stomach of the statue; and supposing that not possible, they could have been obtained from other countries, and the city supplied, like Venice, from distant parts. Whoever has the curiosity to see this design of Dinocrates, must refer to the History of Architecture, by Fischer. Diodorus Siculus * says, that Semiramis had the mountain Bajitanus, in Media, cut into a statue of herself, 17 stadii high, surrounded by 100 others, probably representing the various members of her court. China, among its other wonders, has many mountains cut into the figures of men, animals, and birds. It is most probable that all the sculpture of this description in that country, described by travellers, originates in fancy, as the clouds, the sound of bells, or the spots in the sun's disc, alter according to the imagination of those who contemplate them. Dinocrates, however, was usefully employed in the foundation of Alexandria,† and few architects ever had to direct a work of such vast importance. The situation was well chosen for a commercial city,

* Lib. ii. cap. 1.

† Pliny, lib. v. cap. 10.

being surrounded by a country the most productive in Egypt, with an internal navigation by means of the Nile, a natural, spacious, and secure port in the Mediterranean, and, in short, all the requisites to render it the grand emporium of Africa, Asia, and Europe. It was surrounded by walls of immense circumference, fortified with towers; it had also aqueducts, fountains, canals, a prodigious number of houses for the inhabitants, squares, edifices for the public games, temples and palaces, so magnificent and spacious that they almost occupied a third of the city. It is believed that Dinocrates rebuilt the Temple of Diana at Ephesus, that he erected another in Alexandria, in honour of Arsinoë,* sister and wife of Ptolemy Philadelphus. The whole interior was to have been incrustated with loadstone, in order that the statue of the princess, composed of iron, should be suspended in the centre, but at the death of King Ptolemy, and of the architect, this idea was abandoned, and has never been executed elsewhere, although a similar fable was invented of the tomb of Mahomet. He also directed the funeral obsequies of Hephæstion,† which cost 12,000 talents.

SATYRUS AND PHŒNIX

Flourished under Ptolemy Philadelphus, but all that is known of their works is, that one of them made a canal, lined with stone, for the purpose of conveying to Alexandria an obelisk,‡ sculptured by command

* Pliny, lib. xxxiv. cap. 14.

† Plutarch, Life of Alexander.

‡ Pliny, lib. xxxvi. cap. 9, describes the method adopted in removing this obelisk, which was 80 cubits high: two vessels were loaded with

of Nectabis, an ancient king of Egypt, and raised it in the centre of the city.

SOSTRATUS,

ONE of the most celebrated architects of antiquity,* and so esteemed by Ptolemy Philadelphus that he was surnamed “ the friend or favourite of kings.”† Lucian speaks of one Sostratus, an engineer, who himself defeated the whole army of Ptolemy, and obliged the city of Memphis to surrender without an attack, by simply turning the course of the Nile : we are ignorant if this was the same Sostratus.

Among the different works of this architect‡ were the celebrated passages, or rather terraces, which he constructed in Cnidus, his native country ; but his greatest was the light-house in the isle of Pharos,|| considered one of the wonders of the world, which cost more than half a million of crowns. It was a species of tower, which Ptolemy caused to be erected on the summit of a rock in the above-mentioned island, then near a mile from Alexandria, 450 feet high, and could be seen at a hundred miles distance, consisting of several stories, each decreasing in size ; at the top was a species of lantern, where fires were lighted at night to guide the coasting vessels. The ground story was hexagonal, the sides alternately concave and convex ; each was a stadium long, that is, the eighth of a mile : the second and third stories

stone a foot square, equal to twice the weight of the obelisk, and floated under it as it lay across a canal ; the stones were then taken out, and the vessels rose up with the freight intended for them.

* Strabo, lib. xvii.

† Dial. Iippi.

‡ Pliny, lib. xxxvi. cap. 12.

|| Strabo, lib. xvii.

were of the same form; the fourth was a square, flanked by four round towers; the fifth was circular. A magnificent staircase led to the top. The whole building was of wrought stone, and not only served for the convenience of navigation, but also as a defence to the port, for which purpose it was surrounded by a wall, following the outline of the rock. On the Pharos was this inscription in Greek:—“Sostratus of Cnidus, son of Dexiphanes, to the gods the saviours, for the benefit of sailors.” Some accounts state that Sostratus, after having secretly covered this inscription with cement, placed over it another in honour of Ptolemy, which, in a few years, mouldered away and shewed the first; while others maintain that Ptolemy left the inscription to the will of the architect, and that by the gods protectors was understood the king and queen, and their successors, who were ambitious of the title of Soter, or Saviour.

Dexiphanes, a Cyprian, who lived at the time of the famous Cleopatra, the last queen of Egypt, restored this Pharos, and by means of a jetty united it to the continent, a short time before the Christian era; for this the queen rewarded him with the important office of director of all the buildings she was then erecting. From the accumulation of mud thrown up by the Nile, the Pharos has long ceased to be an island.

The same Ptolemy Philadelphus,* desirous of encouraging the growth of science and the fine arts in his peaceful kingdom, added to the Temple of Serapis, the most beautiful and magnificent of that time, except Jupiter Capitolinus, a library which contained 700,000 volumes. The architect of these two great works is unknown. This incomparable library was destroyed, A. D. 642, by the Caliph Omar, and the books served instead of wood to heat the baths for six months. There is said to be a

* Strabo, lib. xvii.

prodigious collection of books in the monastery of St. Croix, on Mount Ararat, in Ethiopia. Antonio Brieo and Lorenzo of Cremona, who were sent into these countries under Gregory XIII., saw this immense collection, containing 10,100,000 volumes, all written on fine parchment, each kept within beautiful silken covers. Its origin has been attributed to the queen of Sheba, who, among the presents made her by Solomon, received the works of Enoch on the elements, and other philosophical subjects, all the 100 books written by Noah on mathematics and the sacred writings, the treatises which Abraham composed on philosophy and taught in the valley of Mamre, and with those the books of Esdras, the Sibyls, the Prophets, the chief Hebrew priests, and those composed by the learned queen herself; all which is attested by the Father Kirker, as well as by a number of other literati. But we cannot credit this statement.

After the first Ptolemies, architecture began to decline in Greece, in consequence of the wars which devastated the whole country; and at that time flourished in Egypt, as Philopater* sent 100 architects with rich gifts to Rhodes, which had been injured by an earthquake; and his father, Euergetes, after the victory gained over Antiochus, returned into Egypt with 2,500 statues, many of which had been erected under Cambyses: but this prosperity only lasted in Egypt under the three first Ptolemies.

* Polyb. lib. v. cap. 9.

COSSUTIUS

(B. C. 200)

WAS one of the first Roman architects * who followed the manner of the Greeks, and acquired such fame that Antiochus the Great, B. C. 196, selected him to finish the Temple of Jupiter Olympius at Athens. Cossutius is said to have excelled in the proportions which he gave to the cell, and in the arrangement of columns after the dipteral form, as also for the elegance and knowledge he displayed in the Corinthian order. He composed a treatise on what he had executed, following the custom of the Grecian architects; but before the time of Vitruvius this treatise was lost. It appears extraordinary that we have no previous notice of any Italian architects, when it is known that the Tuscan order, or rather the simple Doric, was introduced very early into Italy, and that Porsenna, king of Etruria, had a tomb erected for his family near Clusium, which was of stone, and very similar to the labyrinth of Crete. If we are to rely on Varro, the stones of this monument were each 30 feet wide and 50 feet long, and at the top were five pyramids, 75 feet wide and 150 feet high. It is said † that under Tarquinius Priscus Rome was surrounded by a wall of stone, and that the magnificent subterraneous conduit, called the Cloaca Maxima, was constructed.

Under the same king was commenced the Temple of Jupiter Capitolinus, which was finished at a great expense in the time of Tarquinius Superbus, who, for this purpose, had the best artists from Etruria. Whatever may be

* Vitruvius, lib. vii. pref.

† Livy, lib. i. cap. 55.

said of these and other works, it is certain, that before the Romans made war out of Italy, they had as a body no other feeling than a love for their country, which was sometimes the excuse for plundering the neighbouring nations and dividing the spoils in common. Rome, for more than a century, was the school of discipline, frugality, and policy, but not of arts and sciences. Her buildings at this early period were large and solid, though neither beautiful nor ornamental; but when the Romans visited the cities of Greece, their minds became cultivated, their taste improved, and the genius which presided over Grecian architecture removed her seat to the imperial city.

HERMODORUS OF SALAMIS

(B.C. 100)

ADDED to the Temple of Jupiter Stator* a peripteral portico, by order of Posthumus Migellus, with six columns to each façade, and eleven at the flanks, comprising those of the angles. The distance of these columns from the wall of the cell was equal to their intercolumniation. It is thought that Hermodorus built the Temple of Mars in the Circus Flaminius, and perhaps it is of him that Cicero† speaks in his orations, as the most proper person to construct a sea-port.

* Vitruvius, lib. iii. cap. 1.

† Cicero, lib. i. cap. 14.

SAURUS AND BATRARCHUS

WERE both Lacedemonians, and built, at their own expense, certain temples at Rome,* which were afterwards enclosed by Octavius; but not being allowed to inscribe their names, they carved on the pedestals† of the columns a lizard and a frog, which, in fact, implied them. The columns are now in the monastery of St. Eusebius at Rome, or in the church of St. Lorenzo, without the walls.

C. MUTIUS,

(B.C. 100,)

AN architect, who constructed the Temple of Honour and Virtue‡ at Rome, near the trophies of Marius. The ancient ruins near St. Eusebius are supposed to be the remains of this temple. It was peripteral,|| but without a posticus. The true laws of the art were exemplified in the cell, the columns, and the entablature; and had it been built of marble, or the richness of the material suited to the delicacy of the work, it would have been one of the most sumptuous and celebrated of antiquity.

* Pliny, lib. xxxvi. cap. 5.

† In the church of St. Lorenzo are two Ionic capitals, with a lizard and frog carved in the eyes of the volutes, which are probably those alluded to, although the word *pedestal* is mentioned.

‡ Vitruvius, lib. iii. cap. 1.

|| Ibid. pref. lib. vii.

Silver medals are said to have been struck in memory of this work. It probably was divided into two parts, and may be the same erected by that Marcellus,* called the Sword of Rome, who was five times consul, and at the taking of Syracuse is said to have shed tears, and to have much esteemed Archimedes, notwithstanding the resistance he made against him. This Marcellus conceived the idea of erecting a temple to Honour and Virtue, dividing it into two parts, so placing them that it was necessary to pass through that of Virtue to gain that of Honour. In this temple the senate passed the decree for the recalling of Cicero, which ran thus:—
 “ In Templo Honoris et Virtutis honos habitus esset virtuti.”

VALERIUS OF OSTIA,

ONE of the chief architects and engineers of his time. He executed many considerable works, which are unknown to us. He first invented the manner of covering† the theatres, when Libo the Edile exhibited spectacles to the Roman people.

This is all the information we have of the Roman architects who flourished in the time of the republic: this may be attributed to the loss of many writings which mentioned them. But for Vitruvius,‡ we should still be ignorant of the names of many Latin authors who wrote on architecture. Fussitius was the first Roman who composed a work on the proportions of the orders.

* Livy, lib. xxvii. cap. 25. † Pliny, lib. xxxvi. cap. 15.

‡ Preface, lib. vii.

Terentius Varro left a treatise on this art. One Publius Septimius wrote two books on the same subject; and Cornelius Celsus, although possessed of very common talents, wrote on civil and military architecture. To supply this sterility, we have recourse to medals and ancient fragments, but we learn only from them the names of Lucius, a Roman, of Marcus Valerius Artema, a freedman of Menandrus, and of Demophanes, Greeks.

CHAPTER IV.

FROM THE REIGN OF AUGUSTUS TO THE
DECLINE OF ARCHITECTURE.

From the Beginning of the Christian Era to the Fourth Century.

THE reign of Augustus* was the golden age of science and the fine arts. Grecian architecture at that period was so encouraged at Rome, that Augustus could with reason boast of having left a city of marble where he had found one of brick. In the time of the Cæsars,† fourteen magnificent aqueducts, supported by immense arches, conducted whole rivers to Rome, from a distance of many miles, and supplied 150 public fountains, 118 large public baths, besides the water necessary for those artificial seas in which naval combats were represented: 100,000 statues ornamented the public squares, the

* Among the many edifices constructed at Rome in the time of Augustus, may be enumerated the Temple and Forum of Mars the Avenger, the Temple of Jupiter Tonans, and that of Apollo Palatine, with public libraries; the Portico and Basilica of Caius and Lucius, the Porticoes of Livy and Octavia, and the Theatre of Marcellus: and during the emperor's residence in Spain, Agrippa, at his own expense, built the Porch and Temple of Neptune, the hot baths called *Thermæ Agrippæ*, and the magnificent Pantheon; its portico is generally allowed to be "the most sublime result that was ever produced by so little architecture." He also conveyed the waters Virgo, Julia, and Tepula, to Rome, by aqueducts of stupendous length, decorated with large and beautiful columns of marble, besides repairing those which brought the waters Appia and Marcia to the city. See *Suetonius in August. Cassiod. lib. vii. epist. 6. Front. in Aquæduct. &c. &c.*

† *Roma Antica Nardini.*

temples, the streets, and the houses; 90 colossal statues raised on pedestals; 48 obelisks of Egyptian granite, besides, adorned various parts of the city: nor was this stupendous magnificence confined to Rome, or even to Italy. All the provinces of the vast empire were embellished by Augustus and his successors, by the opulent nobles, by the tributary kings, and the allies, with temples, circuses, theatres, palaces, aqueducts, amphitheatres, bridges, baths, and new cities. We have, unfortunately, but scanty memorials of the architects of those times; and, amidst the abundance of magnificent edifices, we search in vain for the names of those who erected them. However much the age of Augustus may be exalted, we cannot think it superior, or even equal to that of Alexander: the Romans were late in becoming acquainted with the arts; they cultivated them more from pride and ostentation than from feeling. Expensive collections were frequently made, without the possessors understanding their value; they knew only that such things were in reputation, and, to render themselves of consequence, purchased on the opinion of others. Of this, the Roman history gives frequent proofs. Domitian squandered seven millions in gilding the Temple of Jupiter Capitolinus only, and had from Athens a number of columns of pentilic marble, extremely beautiful, and of good proportion, but which were recut and repolished, and thus deprived of their symmetry and grace. If the Romans did possess any taste for the fine arts, they left the exercise of it to the conquered—to Greece, who had no longer her Solon, Lycurgus, Themistocles, and Epaminondas, but was unarmed, depressed, and had become the slave of Rome. “*Græcia capta ferum victorem cepit.*” How poor are such triumphs to those gained by the fine arts! The means by which Greece acquired and maintained such excellence, is worthy of an inquiry. It is generally allowed

that climate and government have a powerful influence on the intellect. Greece was peculiarly favoured in these two points; her atmosphere was serene and temperate, and being divided into a number of small, but independent states, a spirit of emulation was excited, which continually called forth some improvement in the liberal arts. The study of these formed a principal branch of education in the academies and schools, to which none but the free youth were admitted. To learning alone was the tribute of applause offered. At those solemn festivals to which all Greece resorted, whoever had the plurality of votes was crowned in the presence of the whole assembly, and his efforts afterwards rewarded with an immense sum of money; sometimes a million of crowns. Statues, with inscriptions, were also raised to those who had thus distinguished themselves, and their works, or whatever resembled them, for ever after bore their names; distinctions far more flattering than any pecuniary reward. Meticius gave his to a square which he built at Athens, and the appellation of Agaptos was applied to the porticoes of the stadium. Zeuxis, when he painted Helen, collected a number of beautiful women, as studies for his subject: when completed, the Agrigentines, who had ordered it, were so delighted with this performance, that they requested him to accept of five of the ladies. Thebes, and other cities, fined those that presented a bad work, and looked on them ever afterwards with derision. The applause bestowed on the best efforts, was repeated by the orators, the poets, the philosophers, and historians: the cow of Miron, the Venus of Apelles, and the Cupid of Praxiteles, have exercised every pen. By these means Greece brought the fine arts to perfection; by neglecting them, Rome failed to equal her; and, by pursuing the same course, every country may become as refined as Greece.

VITRUVIUS POLLIO

WAS neither born at Verona nor at Placentia, as some have imagined, but at Fornia, now called Mola di Gæta. He lived in the time of Augustus, who gave him a pension for life, and to whom Vitruvius, then advanced in years, dedicated his celebrated work on architecture, the only one of antiquity remaining, and without which we should be even ignorant of his name. This elaborate treatise gives the rules of Grecian architecture, and, uniting history, acquaints us with the names of many ancient architects and their works. The perusal of that part of his writings* in which he treats of the requisite qualities of an architect, should cause those to blush who pursue the profession solely for the purpose of profit, and who are guided by no other feeling than interest. Would that the lessons of our author might excite regret in such men, and induce them to follow it from motives of honour! Vitruvius may be regarded as the father of architecture, and well deserving those comments and translations that have been published, among which, that of the Marquess Galiani has excelled every other: it should be the study of all who wish to acquire taste and sound architectural knowledge. Many defects have been pointed out in this author, but in no human performance can we expect to find perfection.

“ Whoever thinks a faultless piece to see,
Thinks what ne’er was, nor is, nor e’er shall be.”

We do not for certainty know of any edifice in which

* Vitruvius, lib. i. cap. 1. pref. lib. vi.

Vitruvius was employed: it has been asserted that he designed the Theatre of Marcellus, but its arrangement is not consistent with his precepts; he disapproved of dentils in the Doric order, which are used in this theatre. He mentions* his having built the basilica, or Temple of Justice in Fano, which he thus describes: The central nave was 120 feet long and 60 wide, supported by 18 Corinthian columns 50 feet high; the lateral naves were 20 feet wide, and it is to be observed, that to these were attached pilasters 20 feet high, 2 feet and a half wide, and 1 foot and a half thick; on these were laid the beams of the floor; above these pilasters were others 18 feet high, serving as supports to the soffit, which was lower than that of the great nave: the space between the intercolumniations above the architrave of the pilasters served for windows: opposite to one of the principal sides was the tribunal, in the form of a semicircle 46 feet wide, and sunk 15 feet, in order that the merchants in the basilica should not impede those who were before the magistrates. Vitruvius allowed the proportions of the orders to be occasionally changed; we cannot, however, accede to his doctrine of making the shaft of the Ionic equal to the Corinthian, because each order has to maintain its own particular character, and consequently each of its parts ought to have dimensions different from those of the other orders. His writings appear to some readers dry and too minute: certainly the study of his work alone is not all that is requisite to form an architect. He was learned both in civil and military architecture; the latter he reduced to very simple principles. At length, overcome by the jealousies of his contemporaries, he took refuge in philosophy, and gave himself up more to study than to practice. We are not informed that he ever visited

* Vitruvius, lib. v. cap. 1.

Greece, so that he must have acquired a knowledge of her architecture entirely from books. If we can judge of authors by their works, he was a man of excellent morals.

VITRUVIUS CERDO,

A FREEDMAN of Lucius, erected at Verona* (said to be his native country) a beautiful triumphal arch,† called of the Gavii, of the Corinthian order. In the entablature were modillions and dentils, which were too much disapproved of by the great Vitruvius for it to have been, as some suppose, his design. The arches called triumphal were not always erected for victories gained by sovereigns or their generals; that of Verona was for four of the Gavii family, and was not improbably their sepulchre. Many raised by Domitian, and other sovereigns, in the Campagna and elsewhere, were certainly not for triumphal memorials, but for some important benefit rendered to the public, or from vanity.

There is no country in which these arches are so numerous as in China: they are found not only in the cities, but on the mountains, and are erected in the public streets in honour of princes, generals, philosophers, and mandarins, who have benefited the public, or signalled themselves by any great action: there are more than 1100 of these latter, 200 of which are of extraordinary size and beauty: some in honour of females. The Chinese annals reckon 3636 men who have merited triumphal arches: they have a large gate in the centre, and some three, the lateral ones being the smallest; many

* Grut. p. 186. Inscrip. 4.

† Antiq. Veron. p. 21.

are of wood, with pedestals of marble; the most ancient are the finest, and are well sculptured with flowers and animals. Since the last conquest, the genius of the Chinese has become much debased: their architecture in general is much inferior to ours, both in proportions and in the distribution of the parts, having neither capitals nor cornices. The friezes are of a great height, and ornamented with sculpture: the highest arches are 25 feet, embellished with human figures, animals, flowers, grotesque forms in various attitudes and in full relief.

C. POSTHUMIUS AND L. COCCEIUS AUCTUS

WERE both freedmen, and celebrated architects: the second, a disciple of the first, was employed by Agrippa in various works about Naples, near which city he cut through the mountain* now called the Grotto of Pozzuolo;† there is at the same place an ancient temple of marble, of the Corinthian order, dedicated to Augustus,‡ now to St. Proculo, which is supposed to have been built by the same L. Cocceius. From some inscriptions, the names have been discovered of C. Julius Posphorus, son of Lucifer, of C. Licinius, Alexander, Sextus, Pompeius, and Agasius; and this is all that we know of the architects of the time of Augustus, a period the most fruitful in works and artists. Caligula expended immense trea-

* Strabo, lib. v.

† Its length is nearly three quarters of a mile, its breadth about 24 feet, and its height unequal. It is paved with large flags of lava, and is lighted by two circular apertures bored through the mountain, and at night by lamps.

‡ Scipio Mazzela, *Antiq. di Pozz.*

suces in erecting temples to his own honour, in vainly endeavouring to cut through the Isthmus of Corinth, in enlarging the imperial palace at Rome, and in that whimsical bridge at Baia, in imitation of the celebrated one of Xerxes. The emperor Claudius undertook works not less useful than bold; such as drawing off the water from the lake Fucino, which Augustus had not dared to attempt; constructing the port at Ostia, in which Julius Cæsar failed, and which was necessary to protect the fleets that brought corn from Africa and Asia, for the purpose of supplying the city in the times of scarcity. Claudius completed this port with true Roman magnificence.

CELER AND SEVERUS

WERE the architects employed by Nero,* after the great conflagration of Rome, in the construction of his golden house, which surpassed all that was stupendous and beautiful in Italy, and proclaims the extravagance of the emperor as much as any thing else he undertook. His statue, 120 feet high, stood in a court ornamented with porticoes of three files of lofty columns, each file a mile long: the gardens were of vast extent, with vineyards, meadows, and woods, filled with every sort of domestic and wild animals: a pond was converted into a sea, surrounded by a sufficient number of edifices to form a city: pearls, gems, and the most precious materials were used every where, and especially gold, the great profusion of which, within and without, and even on the roofs, caused it to be called the

* Tacitus, Ann. lib. xv. cap. 42.

golden house: the essences and perfumes continually shed around, shewed the extreme extravagance of this inhuman monster, who, for the purpose of gratifying his pleasures, seized on the wealth of others. Among other curiosities was an eating-room,* in which was represented the firmament constantly revolving, imitative of the motion of the heavenly bodies; from it was showered down every sort of odoriferous water. Nero did not complete this palace, as the first order of Otho was the sum of 90 millions of sesterces for the finishing it. The ground not occupied by it,† was left to the inhabitants of Rome to build their houses on, which were not rebuilt in the same manner as after the conflagration by the Gauls; the streets were made more spacious, the squares widened, and surrounded by porticoes. The emperor published many wise regulations to prevent the repetition of a misfortune which some imputed to him. At a certain height, wood was not permitted to be used, but stone from Alba,‡ or Galba, as the most likely to resist fire; reservoirs were provided, and persons constantly ready to render the most prompt assistance in case of accident; the houses were to be a certain distance from each other, and they were to have no wall in common. These regulations rendered the city more beautiful, more commodious, and more secure; nevertheless, the wide streets were objected to as not affording sufficient shelter from the sun; but it is usual to condemn all that is new, particularly if the projector is disliked, as if the vicious could not do any thing that was good. Suetonius assures us, that Nero intended to extend the walls of Rome to

* Suet. cap. 31, and in Oth. cap. 7.

† Tacitus, lib. xv. cap. 43.

‡ Vitruvius, lib. ii. cap. 7, says, that the Alban and Gabian stone was not the hardest, but it resisted fire; while the stone from other quarries was apt, when heated, to crack and fly off in fragments.

Ostia, and afterwards, by means of a canal, conduct the sea to the Seven Hills, an idea very likely suggested by these two architects, who were great projectors, and who undertook to make a canal from lake Avernus to the Tiber. This canal was to be 160 miles long, and sufficiently wide to admit of two vessels abreast; all the prisoners were collected, immense treasures were exhausted in cutting through mountains, but the obstacles they met with dispirited them, and the work was relinquished: the motive was ridiculous, being only to prevent the vessels from doubling cape Misenum. His great palace was but of short duration; the good emperor Vespasian restored to the people the lands which Nero had taken from them, and thus the golden house disappeared like one of the enchanted palaces of Tasso and Ariosto; and in its place arose the mighty Colosseum* and the magnificent Temple of Peace. His son Titus, the delight and love of human kind, erected baths and other edifices, and rebuilt Rome, which was in a great measure destroyed by a fire that burned three days and three nights, supposed to proceed from the earth.

* It may justly have been called the most imposing building, from its magnitude, in the world. It is of an oval form, the longest diameter 620 feet, and the transverse 513 feet 5 inches, measured from the outer face of the walls, from which the columns project 1 foot 10 inches. The clear width of the present arena, which originally was somewhat less, is 180 feet 3 inches, and its length 287 feet. There were eighty arched openings round the ellipsis, the four at the extremities of the two diameters are the widest: the whole height of the external wall is 157 feet 6 inches, and decorated with the four orders. It was commenced by Vespasian, and finished by his son Titus, about A. D. 79. In 1813, the ground was excavated within the arena, and many substructions, inscriptions, columns, marble seats, and other fragments belonging to the buildings, were discovered. The materials used in its construction are travertine and other stone for the principal walls and piers, tufo, brick, tile, &c. for the rest. It is now a very picturesque ruin, though probably not half the original building can be said to remain.

But out of such abundance of sumptuous edifices there has not remained the mention of a single architect. From some inscriptions, we learn this useless information, that Claudius Vitalis, architect, died at forty years of age; that Philip, an excellent architect, was buried at Nismes; that C. Sivius Lupos, a Portuguese, built a temple in honour of Augustus, on a rock at the mouth of the Corrunna, in Portugal; and that Apuleius erected one at Tarragona, in Spain, to Diana "The Mother."

RABIRIUS

(A. D. 80,)

WAS considered one of the most learned architects* of his time, and was employed in many works by Domitian,† who was a great promoter of architecture. Rabirius erected his palace, of which there are still some remains, on the Palatine hill, an edifice of wonderful construction: it is censurable in some points, which, however, are not attributed to the architect, but to the caprice of the emperor. The design and opinions upon this magnificent palace may be seen in the works of Bianchini. Rabirius also erected temples, triumphal arches, and finished or built many other public works on the Campidoglio, and in other parts of Rome. Domitian banked up the

* Martial, lib. vii. epig. 55.

† Among the edifices finished by this emperor, some reckon the enriched and highly beautiful triumphal arch of Titus, constructed of large masses of Paros marble. It had originally four columns on each of its two fronts, is the first instance in the use of the composite order, and consists of but one opening or thoroughfare, 17 feet 6 inches wide.

river Vulturno, to prevent the injury caused by its frequent inundations, and from Pozzuolo to Sinvessa made a way called Via Domitiana, 40 miles long. With such solidity did the Romans construct their public ways, that they seemed made for eternity. To accomplish this, it was first necessary, at a prodigious expense, to make the marshy ground firm, and with several strata of stones form a mass of extraordinary depth and width: on this mass, instead of the usual pavement, were placed large stones cut into regular forms, and fixed with great nicety over the whole superficies of the road. That which Domitian formed, met the bridge built by him over the Vulturno, and was terminated by a triumphal arch, also erected by him, at the point where the road united with the Via Appia. The bridge and arch were of white marble very richly ornamented. Rabirius is believed to have been the architect of all these great works. Domitian,* who wished that all he touched might become gold, adopted most barbarous and sanguinary means to obtain it: after his death, the Roman people destroyed his palace, his triumphal arches, and every monument of his pride. They spared those edifices which were of public utility, but destroyed a great part of their ornaments, that no memorial should remain of a sovereign who was regarded with detestation by the whole world.

JULIUS FRONTINUS,

(A. D. 100,)

THOUGH not a professor, certainly evinced great knowledge of architecture. Among other works, he composed

* Plutarch, Vit. Pub.

a book on the Roman aqueducts, of which he had the superintendence, under the emperor Nerva. In this work, besides the names and titles of the persons who had the principal care of the aqueducts, beginning from Agrippa to Frontinus, there are many useful observations on various sorts of public edifices.

C. PLINIUS SECUNDUS,

THE nephew and adopted son of Pliny the naturalist, although not an architect by profession, was very learned, and built many edifices, which he has described with great ability.* When consul in Bithynia, he had the particular care of all those buildings connected with public convenience; he built the baths in the city of Nicomedia; he rebuilt many public and private edifices in various parts of Asia Minor, which had been damaged by fire: at Nicæa he erected a magnificent theatre, and cut a canal of communication from the lake Nicæa to the sea. He shewed so much diligence and knowledge in building, that the virtuous emperor Trajan gave him the general superintendence of the aqueducts and the other employments which Frontinus had exercised; but what does most honour to Pliny is, the excellent use he made of his riches, and which every opulent man should imitate: besides his pleasure houses,—of which he has left elegant descriptions, one called Laurentine,† between Laurentium and Ostia, on the Tyrrhenian sea, and the other, the Tuscan‡ house near Borgo St. Sepulchro, both described

* *Les Plans et les Descrip. des Maisons de Plinie le Consul*, par M. Felibien.

† Pliny, lib. ii. epist. 17.

‡ Ibid. lib. v. epist. 6.

by Scamozzi and Felibien,—he erected at Como, his native place, a library, and endowed it with considerable funds for the maintainance of a professor and poor scholars: not only Como, but Milan and other countries were benefited by Pliny with useful and beautiful buildings. He was certainly not rich; but he found many means to confer great benefits at a small expense.

MUSTIUS

ERECTED a temple to Ceres, by order of, and at the expense of the above-mentioned Pliny,* which was embellished with statues, columns, and other ornaments of marble.

APOLLODORUS

WAS born at Damascus,† and by his rare talents acquired the favour of Trajan, the most exemplary of sovereigns. The works that remain of this architect are considered unequalled: he built the great square of Trajan,‡ to form

* Pliny, lib. ix. epist. 39. † De Ædific. Justinian. lib. iv. cap. 6.

‡ A very extensive and interesting excavation has been made within these few years, which has enabled us to judge, in some degree, of the magnificent buildings that once surrounded the column of Trajan: the marble pavements are 15 feet below the modern streets of Rome. The column is nearly perfect; its pedestal consists of seven blocks of white marble, the cornice of which is in one piece, 20 feet square and 6 feet 4 inches and a half deep. The column is composed of

which, he had to level a hill 144 feet high : in the centre was raised a column, which was to serve not only as a memorial of the victories, but as a tomb to this virtuous emperor ; and its height expressed that of the hill which had been removed, as is seen by an inscription on the pedestal. At the top of the column was a statue of Trajan, with a golden globe in his right hand : some say, that within this globe his ashes were deposited ; others, that he was buried under the column. Among the superb edifices which surrounded the square, was a triumphal arch erected by the Roman people in memory of his heroic actions : neither Rome nor the world could boast of so beautiful an assemblage of buildings. It is to be regretted that little remains of its original magnificence. Apollodorus built a college, a theatre appropriated to music, the basilica Ulpia, a celebrated library resembling that so much enriched by Domitian on the Palatine, the baths of Trajan, temples, roads, aqueducts, and other considerable edifices in Rome, in Italy, and in the provinces of the Roman empire. The Circus Maximus, which was re-established, enlarged, and ornamented by Trajan, is also believed to have been under the direction of

nineteen, each the whole diameter, and about 5 feet in height : in the centre are cut out stairs to ascend to the top. The capital, or last of the nineteen blocks, is 14 feet square, the eggs beautifully sculptured, the order Doric, and the flutings visible at the necking ; the shaft is covered with sculpture proceeding spirally in twenty-two revolutions to the top, representing the exploits of Trajan : the statue of the emperor has been removed, and that of St. Peter substituted in its place.

The height of the pedestal is 17 feet 11 inches, that of the shaft, capital, and base, 97 feet 9 inches, and the ancient part of the pedestal remaining above, 9 feet 6 inches, making a total of 125 feet 1 inch. The height was further increased by the statue and its plinth. The lower diameter is 12 feet 2 inches, the upper 10 feet 9 inches. There are in all 182 steps to the summit. The arch of Constantine contains some of the bas-reliefs and ornaments that formed decorations to Trajan's buildings.

Apollodorus, who was concerned in almost all the noble edifices erected under that emperor; but the most noted work was the bridge* over the Danube, in Lower Hungaria, near Zeverino, where the river is narrowest and most rapid. On account of its great depth, it was necessary to make a foundation, by throwing into the bed of the river a prodigious quantity of various materials, and thus form a mass up to the edge of the water, on which was constructed the piers and the rest of the bridge: there were twenty piers, some parts of which still remain, and twenty-two arches; each pier 60 feet wide and 150 feet high, distant from each other 160 feet: the height of the bridge was 300 feet, and the length 800 perches; that is, a mile and a half; the extremities were defended by two fortresses. The whole was of stone. Europe cannot produce any thing so grand and bold: the inscription ran thus:—“*Quid non domat? Sub jugum ecce trahitur et Danubius.*” But this bridge is nothing to be compared to those in China, where, amongst many others, is that between Focheu and the suburbs of Nanti, which has 100 arches, and so lofty that vessels can pass under them in full sail. The whole is composed of large blocks of white marble, with balustrades, the pedestals of which are ornamented on each side with marble lions. Still more wonderful is the bridge of Loyang, over the sea, in the province of Fokien. It is formed by 300 immense piers, not united by arches, but by blocks of black marble, each eighteen paces long, two high, and as many wide; the balustrades are also ornamented with lions. In China there are many bridges from one mountain to another. Near Kingtung is one of wood, attached to twenty chains of iron, which unites the extremities of two mountains. There is also another of stone, almost four miles long, called the flying bridge, being 400 cubits high, resting on

* Dion. Vit. Trajan.

two mountains, and crossing a valley of frightful depth. The boldness of the Chinese in these and other works of public utility, is superior to all that has been done in any age whatever: they can employ 100,000 men to level a mountain, not from caprice, but for the convenience of commerce.* But let us return to our bridge over the Danube, which has almost disappeared. Trajan constructed it to facilitate the passage of his troops, when he led them against the barbarians. His successor, Adrian, fearing they might use it against the Romans, dismantled it.

Apollodorus† terminated his life unhappily. Instead of cultivating the friendship of Adrian, presumptive heir to the throne, he was imprudent enough to deride him for wishing to shew his knowledge of architecture. When Adrian became emperor he built a temple, dedicated to Venus and Rome, from his own designs, which, when finished, he sent to Apollodorus, to shew him that it was in his power to execute a building without his assistance. Apollodorus, who was not formed for a courtier, contented himself with answering, that if the deities, whose statues were in a sitting posture in the temple, should be inclined to stand up, they would run great risk of injuring their heads against the roof. Adrian discovered the irreparable error; and, as brutality generally succeeds injustice, he abused the sovereign power, and caused Apollodorus to be murdered.

C. JULIUS LACER

FLOURISHED in the time of Trajan; in honour of whom he built a small but elegant temple in the province of

* Barrow's and Earl Macartney's Travels.

† Ælius Spartian. Vit. Hadrian.

Alcantara in Spain, which still exists, under the name of San Giuliano. He also constructed a bridge * over the Tagus, considered the most celebrated in all Spain. It was of stone, 200 feet from the water and 670 feet long, with six arches, each 84 feet span, the piers 28 feet wide; on the bridge was a triumphal arch; and both were by the province dedicated to Trajan. The latter was executed in courses of granite, 4 feet long and 2 high.

At the entrance of the bridge is a small temple, of the same materials, 23 feet high and 14 wide, covered with large flat stones, so well united that, notwithstanding its antiquity, there is not the slightest appearance of its having ever admitted water. The façade is composed of three stones only, supported by two columns; and on one jamb is the celebrated inscription, from which it may be supposed that Lacer was not professionally an architect, but performed the noble office of dedicator. To this great work, which is worthy of being preserved, the whole neighbouring country contributed. Charles the Fifth had the arch rebuilt on a smaller scale, it having been injured by the Moors when they lost Alcantara, an Arabian word signifying bridge. The Portuguese also injured it in the war at the commencement of the present century, but it was restored by Charles the Third.

The bridge of Merida very much resembles the one described, but was built by Augustus, who, after the Cantabrian war, founded the colony called Augusta Emerita, and executed many other great works. The great bridge of Merida, over the Guadiana, is 2575 feet long, 26 broad, and 33 high, with sixty-four circular arches, not all of the same size, formed of large stones, well put together, and producing an appearance of great solidity.

There still exist the ruins of immense aqueducts, of

* *Tristan. de S. Amand. Comment. sur la Vie de Trajan. Grut. p. 162, Inscript. 1, 2, 3, &c. Bergier, Histoire des Grands Chemins de l'Empire.*

three orders of arches, naumachiæ, theatres, baths, triumphal arches, temples, statues, circuses, &c. built by the Romans. But still more imposing are the walls of the destroyed city, which struck Philip the Second with mute astonishment. It is asserted that these walls extended six leagues, that there were 3,700 towers, that the streets were 30 cubits wide, that the city had 80,000 infantry, 10,000 cavalry. Probably, an excavation made among these ruins would afford equal interest with those of Herculaneum or Pompeii, although the destruction of the latter was by more awful circumstances.

DETRIANUS,

MORE a courtier than Apollodorus, cultivated the good opinion of Hadrian,* who confided to his management the greatest works that were done in Rome. This architect restored the Pantheon,† the Basilica of Neptune,

* *Ælius Spartian. Vit. Hadriani.*

† Built by Agrippa, and still remains at Rome, but has undergone frequent alterations in the interior. The simplicity and elegance of the arrangement of its portico cannot be sufficiently commended; the only fault ever attributed to it is the height of its pediment, the tympanum of which was once filled with a bronze bas-relief. It is in front octastyle, and consists in the whole of sixteen columns, the shafts each of a single block of granite. The bases and capitals Corinthian, and of white marble, as well as the entablature and pediment. This portico, measured on the face of the columns, is in extent 110 feet, projects from the face of the *antæ* 44 feet 6 inches, and has three columns on each return. The second, fourth, fifth, and seventh columns, are omitted in the two files behind the octastyle front, thus leaving a very spacious pavement.

The columns are 5 feet diameter, 46 feet 5 inches high, including capital and base, and the entablature measured on the return 11 feet in height. The interior is circular on the plan, 142 feet 6 inches diameter

the Forum of Augustus, the Baths of Agrippina, and many other edifices that had been burnt or destroyed. He also erected a magnificent temple dedicated to Trajan; but his most conspicuous work was that vast structure the sepulchre of Hadrian, and the bridge *Ælius*, now that of St. Angelo. It was ornamented with a high covering of brass, supported by 42 columns, terminated at the top by as many statues.

Detrianus performed the miracle of removing the Temple of the goddess Bona from one place to another. It is to be regretted that we do not know how this was accomplished; we must suppose the temple was not of brick or small stone, but composed of large masses, united together without cement. The temple was taken to pieces, and the stones dexterously removed, and again put together as at first: thus may the miracle be explained: but we cannot comprehend how Detrianus transported to the same situation the colossus of Nero, which was of bronze, 120 feet high; he employed twenty-four elephants, and removed it in an erect posture. No sovereign erected so many buildings as Hadrian, but we may say with Apollodorus, that he had not a pure taste for architecture, though under him it certainly became more refined. He was continually journeying through the provinces, and erecting edifices; whence, his name being so often inscribed on the walls, he was called *Urba Paretaria*.

Among many sumptuous edifices in Gaul, he erected the *Basilica Plotina* at Nismes, the most superb building in that country. He then went to England, to defend that portion of the Roman empire from the incursions of the warlike Caledonians, and erected a wall from the Eden in Cumber-

between the pilasters, which with the columns are Corinthian, and have an entablature with an attic above, and together serve to decorate the walls to a height of 72 feet 3 inches. On the attic is placed an hemispherical dome, making a total height of 148 feet 5 inches from the pavement. The external wall is 23 feet in thickness, and constructed with brick.

land to the Tyne in Northumberland, a distance of eighty miles. This is not to be compared to that built by the Chinese 137 years before Christ, to separate and defend China from the Tartars, which still remains, and extends 500 leagues. It is raised over mountains, and crosses precipices, being almost 20 feet broad in every part, and 30 feet high, with wide openings for the course of the rivers, and a number of towers. The whole was finished in five years; a monument superior to the pyramids of Egypt, both in its utility and its immensity. In almost every province of the empire Hadrian founded new cities, rebuilt those which had been destroyed, and repaired the more ancient; he rebuilt Jerusalem, to which he gave the name of his family, calling it *Ælia Capitolina*. He erected a theatre and various temples, employing the stones of the sanctuary of the Hebrews; and where their Temple stood he placed statues of the gods. Over the gate which led to Bethlehem, was placed a marble hog. But where Hadrian most displayed his taste for architecture was in Greece, particularly at Athens,* a city more admired by him than any other. He finished and embellished the famous Temple of Jupiter Olympius,† which had been

* According to Pausanias, Greece was full of the edifices, bridges, aqueducts, &c. of Hadrian; and in lib. i. cap. 5, he states, that “such temples of the gods as he either raised or adorned, what other gifts he freely bestowed on the Grecian cities, and has granted to the solicitations of the barbarians; all these are committed to writing at Athens, in the common temple of the gods.”

† Sixteen gigantic columns, of the Corinthian order, are all that remains of this temple, which formerly boasted of 120, so disposed as to present a triple row of ten in each front, and a double row of twenty on the flanks. The length, measured upon the upper step, was 354 feet, its breadth 171 feet. The columns were 6 feet 6 inches diameter, and more than 60 feet high. The entire building was constructed with marble from the quarries of Pentilicus. It has been thought that the outer peristyle was constructed by Hadrian, as the bases of these columns are placed on plinths, a practice which the Greeks seldom or never adopted.

begun six centuries before. He erected a pantheon, with a dipteral portico, decastyle, of Corinthian columns, a triple porch, and double on the flanks. Within the rectangular cell were two orders of columns over each other, and a vast enclosure without; also a great library, and other stupendous works, of which there are many remains.* Finally, he retired to Tivoli, and built the magnificent villa which is still the admiration of travellers. In the erecting of so many edifices in the three quarters of the world, the architect Detrianus could not alone have been employed; the names of the others are not handed down to us.

ANTONINUS

WAS a senator of Rome, well versed in architecture,† and built several edifices in Epidaurus, an ancient city of Peloponnesus; the most considerable of which was a temple dedicated to all the gods, and others consecrated

* Pausanias, lib. i. cap. 18, says, that Hadrian raised for the Athenians the Temple of Juno, that of Jupiter Panhellenius, and a temple, or sacred enclosure, common to all the gods. The most remarkable things are 120 columns of Phrygian marble. The walls are constructed after the manner of the porticoes. The cellæ there have a roof of alabaster gilt, and are every where ornamented with statues or paintings. There is also a library and a gymnasium, which is surnamed Hadrian, and which contains 100 pillars of Libyan stone. And, lib. viii. cap. 10, the Temple of Equestrian Neptune, near the Mantinean walls, was built by Hadrian, who placed spies over the workmen to prevent any one from looking into the ancient temple, or taking away any of the ruins. He ordered the workmen to build the new temple entirely round the old one, which was erected by Trophonius and Agamedes. And, lib. x. cap. 35, Hadrian dedicated at Abæ a temple to Apollo. The emperor also built a portico here, which was called after him.

† Ibid. lib. ii. cap. 27.

to Apollo, Æsculapius, and Health. He also built the Baths of Æsculapius, and restored a portico called Coryos, constructed at first of unburnt bricks.

HIPPIAS

Was, according to Lucan,* much esteemed for his peculiar ability in the construction of baths and other edifices destined to pleasure or health. This architect not only chose their situations advantageously, but had a wonderful knowledge in the distribution of the rooms, placing them conformable to their use, and decorating them within and without in a manner which united pleasure, convenience, and health.

NICON,

(Died A. D. 161,)

THE father of the celebrated physician Galen, was a mathematician and architect; but as he never removed from Pergamus, his country, where he taught the Greek language, he had no opportunity of practising his talent in any thing of consequence. Instead of devoting his time to architecture, he exercised his patience, and the mildness of his temper, in enduring the violence of his wife, who, says Galen, her son, was even more furious than Xantippe, the wife of Socrates; it is said that she has

* Lucan. Dialog. Hipp.

sometimes bitten her attendants. Galen also knew something of architecture, on which he has left some excellent rules. He was descended from a race of architects; his father, his grandfather, and great-grandfather, were all of that profession.

Towards the close of the second century lived Ælian, Lucan, Pausanias, Athenæus the Deipnosophist, Julius, Pollux, and many others, who have left us superficial descriptions of several edifices. Under the wise emperors Antoninus and M. Aurelius, many grand works were executed at Rome: the Temple of Antoninus and Faustina;* the column of Antoninus,† much esteemed, but not equal in excellence to that of Trajan; roads, aqueducts, temples, theatres, amphitheatres, and palaces, in various parts of the empire. Laodicea, Smyrna, and other cities of Asia Minor, which had been destroyed by a most dreadful earthquake, were rebuilt.

* The portico consists of ten columns, six of which form the front of the temple; the shafts are of cippolino marble, each in one piece; the rest is of white marble: part of the cell remains, built of peperino stone, once covered with slabs of marble. The extent of the portico, measured on the face of the columns, is 67 feet, and on the return to the face of the pilasters 36 feet 10 inches; the diameter of the columns is 4 feet 10 inches; their height, including base and capital, 46 feet 8 inches; that of the entablature, measured on the flank, 10 feet 9 inches. It is of the Corinthian order, and is the only Roman specimen remaining in which the cornice is executed without dentils or modillions; the frieze on the flank is highly decorated with sculpture; that of the front contains an inscription.

† This column was erected by the emperor Marcus Aurelius, and dedicated to Antoninus Pius; originally it graced a forum, the buildings of which do not remain: the sculpture is in high relief. The height of the present pedestal is 26 feet; the column, with its capital and base, consisting of nineteen blocks of white marble, is in height 97 feet 3 inches; the pedestal above 6 feet, on which is a bronze statue of St. Paul, that of the emperor being removed. The lower diameter is 13 feet 2 inches, and the whole, with its winding staircase, is constructed in a similar manner to that of Trajan, but its proportions are not so elegant.

Under Septimius Severus was erected the Septizonium and the grand triumphal arch, which still exists. Alexander Severus was a great lover of architecture; not content with employing the most able professors, he wished the science taught publicly to the youth destined for the pursuit. In times so happy for the art, it is astonishing that the name of a single architect should not have reached us.

After the good emperor Alexander Severus, that is, about the middle of the third century, we may fix the decline of architecture, and from that period it gradually became worse, till it sunk into the lowest state of barbarism. Not even the beautiful code left by Vitruvius, nor the number of noble edifices, which were speaking books, could stop the progress of this corruption. The contrary should have happened; that is, architecture should have been stripped of its defects and brought to perfection. But all art and science, from various causes, began at that time to decline, and, by its strict connexion with them, architecture shared their fate. All the edifices erected afterwards had no other recommendation than that of solidity, as is seen in the arch of Galienus, contiguous to St. Vitus, near St. Maria Maggiore, and in the basilica of St. Peter's, erected by Constantine. The baths of Dioclesian were so surcharged with ornament, that at the spectacles given by that emperor, the spectators were almost overwhelmed with the carving that projected out from the edifice. His palace of Spalatro, at Salona in Illyria, each side being 705 feet, had four vestibules, each 35 feet wide, and the principal one 246 feet to the court-yard, the transverse one 480 feet, the whole having arches.

OF THE
ANCIENT ARCHITECTS.

BOOK II.

OF THE ARCHITECTS OF THE MIDDLE AGES, *viz.* FROM
THE FOURTH TO THE FIFTEENTH CENTURY.

CHAP. I.

FROM CONSTANTINE TO CHARLEMAGNE.

THE emperor Constantine despoiled the whole empire of statues, pictures, bas-reliefs, marbles, and bronzes, in order to decorate Constantinople, and make it a second Rome; but the architecture of his new city was as inferior to that of Rome as its situation was superior to that on the dark and troubled Tiber.

METRODORUS,

A native of Persia,* who in India erected fortifications, baths, and other edifices, introducing into that country a branch of science till then unknown; for which the Indians and their king rewarded him with jewels of immense value. Returning into Persia, and seeing the Christians persecuted, he went to Constantinople, where,

* Cedrenus, Hist. Compend.

by his riches, he obtained the friendship of the emperor Constantine, and induced him, it is said, to carry a war into Persia in favour of Christianity. It is not known whether this architect erected any buildings in Constantinople.

ALYPIUS,

(A.D. 363,)

A learned architect of Antioch, who held many important offices under the emperor Julian. It is said* that he was commanded by that emperor, A.D. 363, to rebuild the Temple of Jerusalem, and that when the workmen were employed in excavating for the foundations, fire issued from the earth and destroyed them; an indication of the Divine wrath against the reprobate Hebrews and the apostate Julian. The story is affirmed by many respectable and classic authors, but we are not bound to credit it.

CYRIADES

Was honoured with the consular dignity, and, from his knowledge in architecture and mechanics, was employed by the emperor Theodosius in the construction of a new basilica and a bridge, the situation of which is not known. In the building of the latter he evinced a disposition to

* Amm. Marcell. lib. xxxiii.

avarice, which should never belong to an architect; he was accused of not forwarding the work, and of not giving it the proper solidity: the direction of the buildings was therefore given to his accuser Auxentius, also a senator; but Cyriades raised so powerful a party against him, that he was obliged to abandon the work. Symmachus, the prefect, well versed in architecture, was then ordered by the emperor to inquire into the affair. He began by reviewing the accounts of Cyriades; and that the building of the bridge might not be interrupted, he gave the care of it to Afrodisius, consul and tribune, and well deserving the confidence reposed in him. We do not know the issue of this inquiry, but the letters of Symmachus* lead to a conjecture that Cyriades could not expect a favourable sentence from so skilful and upright a judge.

SENNAMAR.

THIS Arabian architect flourished in the fifth century. He built two palaces, or castles, one called Sedir, the other Khaovarnack, which the Arabs have placed among the wonders of the world; and with reason, if the singularities recounted of them are not fabulous; one single stone, how arranged it is difficult to imagine, unites the whole structure of each of these edifices, so that if the stone were removed they would fall into ruin. To this wonderful fact is added another, viz. that the colours of the stones of the walls vary several times a day. The king Noman Alaouvar, tenth king of the Arabs, recompensed this wonderful architect with rich gifts; but,

* Lib. iv. epist. 71; lib. v. epist. 74; lib. x. epist. 38 and 39.

becoming afterwards fearful that he might build similar edifices elsewhere, or make known the situation of the important stone, which was the key to the whole mass, or whether the architect boasted he could have performed greater wonders, had he been secure of receiving such a recompense, certain it is that the monarch, from one of these causes, had him precipitated into a ditch.

ENTINOPUS OF CANDIA

WAS the first who contributed to the foundation of Venice.* We find in the archives of Padua, that when Rhadagasus entered Italy, and the cruelties exercised by the Visigoths obliged the people to take refuge in various places, an architect of Candia, named Entinopus, was the first to retire to the fens of the Adriatic, where he built a house, which remained the only one for some years. At length, when Alaric continued to desolate that country, others sought an asylum in the same marshes, and built twenty-four houses, which may be called the germ of Venice. Historians inform us that the house of Entinopus being afterwards attacked by fire, A.D. 420, which communicating to the others, destroyed all except that of the architect, which was miraculously saved by a shower of rain falling at his prayer, he made a vow to convert his house into a church, and dedicated it to St. James: the magistrates, who were among the new inhabitants, contributed to the building and ornamenting of it. This still exists in the quarter of the Rialto, which is universally considered as the most ancient part of Venice.

* *Venetia del Sansovino e Martinoni*, p. 196.

We are now arrived at the period when the Visigoths, Vandals, Huns, Suevi, and other barbarous nations, burst forth in swarms from Scythia, devastating the empire of the West, and under whom the arts and sciences, which had been declining for some centuries previous, became totally degenerated.

ALOÏSIUS

WAS commissioned by Theodoric,* prince of the Ostrogoths and king of Italy, to restore several edifices in Rome and the surrounding countries, particularly the baths and aqueducts, which, from time, neglect, and warfare, were mostly injured. Theodoric was desirous of preserving the principal edifices, and commanded that the materials of those which could not be restored should be used to ornament the new buildings which he was about to erect. The sumptuous Basilica of Ravenna, called the Basilica of Hercules, was embellished with ancient fragments of marble collected from various parts. It was in Ravenna that this king employed Daniel, of whom Cassiodorus speaks with so much esteem, praising him for his ability in arranging the different antique pieces of marble. The prodigious rotunda, the cupola of which was of one piece, 38 feet in diameter and 15 in thickness, and weighing more than 100,000lbs., was the work of this period, viz. 495. It was surrounded by colossal statues of the apostles, which were carried away by the French under Louis XII. It is much disputed by what means such an immense mass was raised so high. This edifice was one of the most

* Cassiod. Varior. lib. xi. epist. 29.

extraordinary of antiquity, and said to have served as the sepulchral monument to some king.

Amasis, king of Egypt, removed from Elephanta to Sais an edifice formed of one block, 52 feet long, 35 broad, and 20 in thickness.

For the better understanding the genius of Theodoric and the Goths in architecture, it will not be useless if we lay before our readers some passages of Cassiodorus, and particularly a letter of his, in the name of Theodoric, to the above-mentioned Aloisius: * —

“ It is glorious to preserve the wonderful works of antiquity, and it is our duty to restore the most useful and beautiful. I, says Theodoric, cannot forget the fountain Abano, which, in the form of a vessel filled with cerulean water, I have seen boil from the bottom as amid burning furnaces; and, notwithstanding the clouds of hot vapour, exhibit a wonderful clearness. The waters overflow the mouth, with a noise like wheels, swell on the lip, fall, and, flowing through tranquil and freezing canals, after many turnings, become boiling. O wonderful artifice! the fires of nature are tempered by art, and that which was originally destructive to man, is, by his ingenuity, rendered wholesome and delightful. With reason do philosophers say that the elements are connected by reciprocal bonds, and that contrary things unite with wonderful confederation. Thus the water, which is precipitated from the rocks in boiling vapours, unites when entering the ornamental edifices of the baths, imparts its heat to the air, and being received into the reservoirs, becomes tractable, and is a useful and agreeable medicine for all sorts of maladies. *Quæ ideo Aponum græca lingua beneficialis nominavit antiquitas.* It is wonderful that the same water, which on its first issuing from the rock is noxious, should, on descending

* Cassiodorus, lib. ii. Varior. epist. xxxix.

to a more temperate soil, and being received into the fish-ponds of Nero, become as cold as it was hot at first. It is most probable, and in correspondence with the character of its author, that this fish-pond was ornamented with stones similar to green gems, in order that the water might, by reflection, appear in motion. But it is more extraordinary still, that, in this same bath, if a woman enters, the waters consume her. Thou, Aloisius, must direct thy attention to the renewal of these edifices, the baths, the conduits, clearing away all the bushes and brambles that have overgrown and insinuated themselves into the very heart of the buildings, and insensibly burst them asunder. *More vipereo, prolem sibi fecunditate contraria nutrant, unde se compago casura dirumpat.* It is also necessary that you rebuild the destroyed palace, and divest of its now rude aspect the space between the public building and the fountain. Every thing should have a smiling appearance with the Antenor land of wonders; among which the most remarkable is, that whoever steals beasts cannot deprive them of their wool, unless they are first dipped in the scalding waters of these mountains. *Loquitur illic tacita natura dum judicat et sententiam quodammodo dicit, quæ perfidiam negantis excludit.* Expend what is necessary, and if the money which I have sent is not sufficient, send me an account of what is wanting and I will supply you. *Quia non gravamur expendere ut tanta videamur ruris amœna custodire."*

The fabulous property of this water against thieves and women, takes nothing from the merit of the above letter. Respecting fountains, Cassiodorus appears rather weak in his judgment. He makes king Atalaric say, that the Fountain of Arethusa in the territory of Scillatinus, is the most tranquil of all waters, but as soon as any one speaks, it is disturbed; and if the voice be raised, it foams furiously. But fables belong to all times. Tiberius thought the Fountain of Abano, and his Temple

of Gerione,* miraculous. Sovereigns are not always careful of the public splendour; in this Theodoric shone amongst the most distinguished. His formula to the prefect of Rome on the architecture of the public edifices, is a curious document.†

“ The beauty of the Roman buildings requires a skilful overseer, in order that such a wonderful forest of edifices should be preserved with constant care, and the new ones properly constructed, both internally and externally. Therefore we direct our generosity not only to the preservation of ancient things, but to the investing the new ones with the glories of antiquity. Be it known, therefore, to your illustrious person, that for this end an architect of the Roman walls is appointed. And because the study of the arts requires assistance, we desire that he may have every reasonable accommodation that his predecessors have enjoyed. He will certainly see things superior to what he has read of, and more beautiful than he could ever have imagined. The statues still feel their renowned authors, and appear to live: he will observe expressed in the bronze, the veins, the muscles swoln by exertion, the nerves gradually stretched, and the figure expressing those feelings which act on a living subject. It is said that the first artists in Italy were the Etruscans, and thus posterity has given to them, as well as to Rome, almost the power of creating man. How wonderful are the horses, so full of spirit, with their fiery nostrils, their sparkling eyes, their easy and graceful limbs! they would move if not of metal. And what shall we say of those lofty, slender, and finely fluted columns, which appear a part of the sublime structure they support? That appears wax, which is hard and elegant metal; the joints in the marble being like natural veins. The beauty of art is to deceive the eye. Ancient historians acquaint

* Sueton. lib. xiv. in Tiber.

† Cassiod. lib. vii. Varior. Form.

us with only seven wonders in the world: the Temple of Diana at Ephesus; the magnificent sepulchre of the king Mausolus, from whence is derived the word *mausoleum*; the bronze colossus of the sun in Rhodes; the statue of Jupiter Olympus, of gold and ivory, formed by the masterly hand of Phidias, the first of architects; the palace of Cyrus, king of Media, built by Memnon of stones united by gold; the walls of Babylon, constructed by Semiramis of brick, pitch, and iron; the pyramids of Egypt, the shadows of which do not extend beyond the space of their construction. But who can any longer consider these as wonders, after having seen so many in Rome? Those were famous because they preceded us; it is natural that the new productions of the then barbarous ages should be renowned. It may truly be said that all Rome is wonderful. We have, therefore, selected a man clever in the arts, who, in seeing so many ingenious things of antiquity, instead of remaining merely enchanted with them, has set himself to investigate the reason, study their books, and instruct himself, that he may become as learned as those in the place of whom he is to consider himself appointed."

Can these Goths be the inventors of that architecture vulgarly called Gothic? and are these the barbarians said to be the destroyers of the beautiful monuments of antiquity? Ecclesiastical history gives to the good Christians and the jealous ecclesiastics the honour of having dismantled temples and disfigured statues, in Italy, Greece, Asia, and Egypt.

Boëtius and Symmachus, the first literary men of that age, were both superintendents of architecture. Symmachus had the direction of the buildings raised or restored in Rome, and principally of the Theatre of Pompey, which Theodoric had rebuilt. Thus the king wrote, according to Cassiodorus:—"You have constructed fine edifices; you have moreover disposed of them with so much wisdom

that they equal those of antiquity, and serve as examples to the moderns; and all that you shew us is a perfect image of the excellence of your mind, because it is not possible to build correctly without good sense and a well-cultivated understanding." Is this the language of a Gothic barbarian, the destroyer of good taste? Pericles, Alexander, Adrian, one of the Medici, could not have reasoned better. But who could have imagined, after these fine expressions, that a Symmachus would have been decapitated by Theodoric? Boëtius suffered the same disgrace. However, the most virtuous persons are subject to commit serious faults, as the most depraved sometimes perform illustrious actions.

The greatest man of the time, Cassiodorus, secretary of state to Theodoric, was well acquainted with architecture. He designed every sort of edifice, drew them, and coloured them with equal facility. It is thought that he acted as architect to divers considerable buildings, among which, to the monastery erected at his expense near Squillace, his country, where he retired to pass the last years of his life in tranquillity, giving a fine example to disgraced ministers of state, who are generally wanting in philosophy. The works of Cassiodorus abound with excellent precepts in architecture. It was by his advice that the prudent queen Amatasunta, daughter of Theodoric, patronised science and the fine arts, with which she was desirous that her consort Atalaricus should be acquainted. It is clear, that the Goths were not the authors of that architecture called Gothic. The Goths, and barbarians who overran Italy, had not any characteristic architecture, good or bad. They brought with them neither architects, painters, nor poets; they were all soldiers; and when fixed in Italy employed Italian artists: but as in that country good taste was much on the decline, it now became more debased, notwithstanding the efforts made by the Goths to revive it.

LEON,

BISHOP of Tours* in the sixth century, was an architect, and erected many edifices. In these days of darkness the seculars devoted themselves to arms. The ecclesiastics were the only persons who could read and write, and many monks, abbots, priests, and bishops, practised architecture and the useful trades.

ST. GERMAIN,

BISHOP of Paris,† gave the design of the church which king Childebert erected in honour of St. Vincent. It is now called St. Germain, from the name of this holy bishop. The same king sent the prelate to Angers, to build a church in honour of another St. Germain, bishop of Auxerre; and after finishing this building he erected a monastery at Mans, and others in various places.

St. Avitus, bishop of Clermont, built the church of Notre Dame du Port, and repaired that of St. Anatolien. Fereol, bishop of Limoges, also acted as architect in the restoration of many churches in his diocese.

* Felibien, *Vie des Architectes*, p. 146.

† Greg. de Tours, lib. iii. cap. 29.

DALMATIUS,

BISHOP of Rhodes, wishing to become an architect, undertook to rebuild his cathedral; but not succeeding to his wish, he took it down, rebuilt, and demolished it so many times, that he died without finishing it.

St. Agricola, bishop of Chalons, was the architect of the church in his diocese, and particularly of his cathedral, ornamented with columns, and enriched with marbles and mosaics.

St. Gregory of Tours also made designs for many churches. These three holy bishops lived in the sixth century.

ÆTHERIUS

FILLED one of the first posts in the council of the emperor Anastasius, and was by that sovereign esteemed a most clever architect, for having built in the great palace of Constantinople an edifice called Calci, which was a great saloon.* It is thought that Ætherius built that strong wall which extended from the sea to Selimbria, an ancient city of Thrace, to defend Constantinople from the incursions of the Bulgarians and Scythians. To such weakness was the empire of the East reduced.

* Felibien, *Vie des Architectes*, p. 148.

ANTHEMIUS

Was born at Tralles,* a city of Lydia, in Asia Minor, and, with Isidorus of Miletus, built, by order of the emperor Justinian, the famous Temple of St. Sophia, at Constantinople, which had been first erected by Constantine, but, the roof being of wood, was several times burnt, and as frequently rebuilt by other emperors, and by Theodosius. Justinian was desirous of making it one of the most superb edifices; and on seeing it finished, transported with joy, he exclaimed, “ I have surpassed thee, O Solomon ! ” The situation of the temple is the most advantageous in Constantinople, being on a small hill which overlooks the sea, near to the Seraglio.

The plan of this church is almost square; it is 252 feet long, 228 wide, and stands east and west.

In the centre it has a great hemispherical cupola, 108 feet in diameter, with twenty-four windows in the circumference. This cupola is supported by four large piers of travertine, 48 feet thick, on account of the frequent earthquakes. On these piers are raised four grand arches of one order, 142 feet from the pavement. On the arches is placed a high entablature, surmounted by a balustrade, serving as a drum to the vault of the cupola, which has, above, an aperture covered with a small but lofty lantern. From the centre of the cupola to the pavement is 80 feet. Between the piers is a colonnade of forty columns, 4 feet in diameter, but their height is not known. On the capitals of these columns are arches, and above them sixty other smaller columns, with arches over them. These formed two galleries for the women, who at that time

* Procope, lib. i. cap. 1. de *Ædific. Justin.*

were always separated from the men. The columns were all of the rarest marble, some of porphyry, others of serpentine and statuary. The shaft is almost without diminution; the base and the capitals are singular, not bearing any resemblance to Grecian architecture. So much had good taste degenerated in the very vicinity of its birth, and where it had made the greatest progress.

The great cupola is flanked by two smaller ones, also hemispherical.

At the eastern extremity is a semicupola, under which was erected the only altar that the temple contained, where now the Koran is kept. The whole of the roof is of stone, the cupola ornamented with mosaics, and the walls with paintings. It is wonderful that the Turks should have left so many images of Christ and his saints, having only destroyed the cross. The pavement is of fine marbles, of various colours, among which the most brilliant is the rose. Without was formerly a vestibule, or square piazza, surrounded by porticoes, which are, however, not remaining. From the vestibule you proceed to another portico, the length of the church, not supported by columns but pilasters, and over this another. Nine magnificent bronze doors, the jambs of marble, lead from the portico into the church; the middle one being the largest. Alabaster, serpentine, porphyry, mother-of-pearl, and carnelion, are not spared, either within or without. In the centre of the vestibule was an immense bronze equestrian statue of the emperor Justinian. On entering this temple the spectator is struck with admiration at its size and general effect; but the exterior is trifling, entirely surrounded by deceptions, and the façade is poor. For the erection of it Justinian deprived the professors of science of their salaries, imposed taxes; and to cover the cupola with lead, took up all the conduits of the fountains. The building was scarcely finished, when an earthquake entirely threw down the cupola, which was quickly

rebuilt by Justinian; and for greater lightness, it is said that it was composed of pumice-stone. Since the Turks have converted it into a mosque, they have erected, in front of the façade, a number of marble chapels, with cupolas, used as sepulchres for the young Mussulman princes; and, corresponding with the four angles of the temple, they have raised four minarets, that is, isolated lofty towers. The Turks, who do not use bells, mount to the top of these minarets at certain hours, and singing some verses with a loud voice, invite the people to prayers. St. Sophia has served as a model for the other mosques afterwards erected in Constantinople. That of Solyman is smaller, but the proportions are more beautiful. They are all highly finished, isolated, and surrounded by wide streets; an advantage which our churches sometimes want.

Anthemius, besides being an architect, was also a sculptor and an ingenious mechanic. There is a book on machines attributed to him. He invented various methods of imitating earthquakes, thunder, and lightning.

For some affront offered by the rhetorician Zeno, Anthemius, in revenge, produced an earthquake, which caused him to escape from his house in terror. It is said that he caused this effect by placing a number of kettles of water, and boiling them, between the walls separating his house from that of Zeno.

ISIDORUS OF MILETUS

WAS the associate of Anthemius* in the erection of the church of St. Sophia, and many other edifices built by Justinian, not only in Constantinople but in various parts of his dominions. This emperor having also reconquered some provinces of the Western empire, he despatched several architects to repair the dismantled edifices and erect new ones.

Vegetius says, that at this time there were more than 500 architects employed by Justinian.

Isidorus had a nephew born at Constantinople, and therefore called Isidorus Bezantinus, who, with another architect called John of Miletus, both young men, built the city of Zenobia, in Syria; and terminated this great work with such success, that they acquired a fame equal with the most celebrated artists of their time.

CHRYSES

WAS from Alexandria,† and flourished in the sixth century. He acquired a great name from the embankments which he raised in Dara, a city of Persia, to confine the river Euripos within its bed, and to prevent its flux and reflux from continuing to injure the city. Whoever delights in fable, will read with pleasure in Procopius, that

* Procop. *Ædific. Justin.* lib. ii. cap. 8.

† Ibid. lib. ii. cap. 3.

the invention of these dykes was revealed to Chryses in a dream, in which there appeared to him a man of extraordinary size, who drew the design, and commanded him to go and propose them to the emperor, whom by his art he had inspired with a similar dream and vision.

After the death of Justinian there arose so many revolutions, by the irruptions of the Lungobardi, and afterwards of the Arabs or Saracens, that all was confusion, the arts were neglected, and Grecian architecture became extinct. Many large and expensive buildings were erected, but none beautiful. In Pavia and Perugia the Lungobardi built several rich churches. Clotaire, king of France, erected that of St. Denis, enriched with gold, pearls, and gems, within and without covered with plates of silver. For taste in architecture, riches were substituted; like the painter, who, not knowing how to express the beauty of Helen, arrayed her in a gorgeous dress.

The Caliph Aba-Jaafar Almansor, about the middle of the eighth century, employed two millions of gold in raising from the ruins of Babylon the city of Bagdat, in which he constructed a sumptuous caliphal palace, containing a wonderful hall, called "Of the Tree," because in the centre of it was a large tree; the trunk being of massive silver, the branches of gold, and the flowers and fruit of gems. On the branches were a number of statues, representing horsemen richly habited, and at the foot of the tree many others, which moved in a similar manner with those above. Abderamen, king of the Moors, about the same time, reduced the ancient Temple of Juno, at Cadova, into a grand mosque, which now serves as a cathedral, and is still called Moschita. Its length is 600 feet, and its width 250. It has fourteen gates, ornamented with sculpture and divers works in steel. The principal arch, which is gilt, is supported by 365 columns of jasper, alabaster, and black marble. There are twenty-nine small naves in the length, and all formed

by isolated columns. Thus the number of the columns amounts to nearly a million. The greatest part are the remains of small columns, a foot and a half in diameter, and little more than six brachia in height. The Christians, to make a chapel in the centre, have removed many of them. Thus the singular effect produced by this wood of columns is much diminished.

CHAPTER II.

THE ARCHITECTS FROM THE TIME OF CHARLEMAGNE, THAT IS, FROM THE NINTH, TO THE FOURTEENTH CENTURY.

PERHAPS no sovereign ever gave so much employment to masons as Charlemagne, who, throughout the whole of his vast dominions, erected innumerable and extensive buildings of every description; but no memorials are left of the architects; and the architecture, instead of improving, greatly declined, changing from the massive and heavy, to an excess of lightness, and a redundance of ornament. The greatest project of Charlemagne was that of uniting the German, Mediterranean, and Black seas. His idea was, to make two canals: one to communicate between the Moselle and the Saone, and thus open the passage from the Mediterranean sea to the German ocean; the other was to be between the Rhine and the Danube. In the commencement of this last, a channel was dug, 300 paces long, equally wide, and sufficiently deep to admit of the men of war used at that time; but a variety of causes prevented the execution of this project.

RUMALDE,

(A.D. 840,)

AN architect of Louis the Pious, built the cathedral of Rheims,* using the materials of the ancient city walls,

* Felibien, *Vie des Architectes*, p. 173.

which were in great measure demolished for the purpose. This church has been celebrated as the most magnificent of that time;* but all the descriptions are confined to the front of the altar, which was of massive gold, studded with gems; a statue of the Virgin, also of gold; and many sacred vessels of great value. Such riches are, however, but trifles, compared with architectural magnificence.

TIETLANDUS,

TOWARDS the end of the tenth century, superintended the building of the church and monastery of Einsidlen, called the hermitage of the Virgin, situated in the mountains of Switzerland, a celebrated sanctuary, which has acquired considerable treasures. Eberhard, the founder and first superior, learned in architecture, began the building, which he afterwards transferred to Tietlandus, an architect. The church is in the form of a cross, with three towers; the smallest is in the centre of the cross, and the others, which served for belfries, are at the two sides of the nave.

* *Description Historique et Satistique de la Ville de Rheims*, tom. i. p. 307. The walls were previously demolished by Charles Martel. Saint Rigobert afforded the materials for the building of this church, which was not finished till the tenth century, under Hincmar, who had it paved and glazed, and dedicated it anew in the presence of his suffragans and Charles the Bald. Above the door of the left arcade of the grand façade of the present church, is sculptured a representation of the first, which, according to Flodoard, was richly gilt. It was flanked by round towers, covered with pinnacles, and resembled a castle. It was destroyed by fire, 24th July, 1210.

BUSCHETTO OF DULICHIO,

(Eleventh Century,)

OF Greek origin, and a renowned architect, was employed at Pisa,* in the erection of the cathedral, one of the most sumptuous edifices of that period. It consists of five naves, and is entirely composed of marble within and without, enriched with a variety of columns,† which the Pisans, when a powerful people, imported from distant countries. Buschetto with much difficulty arranged the various fragments of antiquity, as bases, capitals, and cornices, which had been collected from different parts. The plan of this church is a Latin cross: its length, from the face of the wall to the back of the recess, is 311 feet; the width of the nave and four side aisles 106 feet 6 inches; the length of the transept 237 feet 4 inches; and the width, with its side aisles, 58 feet. The centre nave is 41 feet wide, and has twenty-four Corinthian columns, twelve on each side, all of marble, 24 feet 10 inches high, and little more than 3 feet 2 inches in diameter. On the capitals of these columns the arches rest, over which is another order of columns, smaller and more numerous, forming an upper gallery, anciently appropriated

* In 1063, Giovanni Orlandi returned to Pisa, bringing with him six richly laden vessels, the fruits of a victory obtained by him at Palermo. The Pisans resolved to commence a magnificent cathedral on this occasion, and to dedicate their spoils to the Supreme Being; and in 1063 or 1064, the first stone was laid, under the pontificate of Alexander II., Henry III. being emperor, and Widone, or Guidone, of Pavia, bishop of Pisa; and, according to an ancient document, it was finished in 1092.— See MORONA's *Pisa Illustrata*.

† Vasari, vol. i. p. 226.

for the use of the females. The four side aisles have also isolated columns, of the Corinthian order, but smaller, and raised on high plinths, to give them the effect of ranging with the others. The transept has a nave and two side aisles, with isolated columns the same size as those of the others.

The soffit of the great nave and of the transepts is of wood gilt; but the smaller naves are groined.

The height of the great nave is 91 feet, that of the transepts about 84 feet, and that of the lesser naves 35 feet. In the centre nave are four piers, on which rest four large arches, supporting an oval cupola. More than one hundred miserable windows give light to the building.

A circular flight of fifteen steps surrounds the edifice. The façade* has five stories: the first consists of seven arches, supported by six Corinthian columns and two pilasters, the middle arch being larger than the others: the second has nineteen arches, supported by eighteen columns and two pilasters: the third is curious, as, where the side aisles finish, the façade contracts and forms two lateral inclined planes, whence in the middle are columns with arches on them, as below; the columns which are in the two inclined planes gradually diminish in height: the fifth story is the same, and forms a triangular pediment, the columns as they approach the angles becoming more diminutive.

The two exterior sides of the temple have two orders of pilasters, one over the other. The roof of the great nave is supported externally by a wall decorated with columns,

* The extreme width of the western front, measured above the plinth moulding, is 116 feet, and the height from the pavement to the apex of the roof 112 feet 3 inches: the two lower stories occupy half the height, and together constitute the proportion of a double square; or the whole height may be said to be divided into six parts, two of which are given to the lower range of arches, and each of the others to a gallery or loggia.

with arches resting on the capitals. The whole of the building is covered with lead.

The drum of the cupola is externally ornamented with eighty-eight columns, with arches, over which are pediments in marble, which form a species of crown. On the south side is the tomb of Beatrice, mother to the famous countess Matilda, formerly having this inscription : *

Quamvis Peccatrix sum Domna vocata Beatrix.

In Tumulo missa jaceo quæ Comitessa. —

Such lines were then the most exquisite productions of the human intellect. The architecture of this temple, however absurd its ornaments may be, is not entirely in the heavy taste of what is called modern Gothic. The proportions of the whole are not contemptible, and have some solidity. †

Buschetto died at Pisa, where is his sepulchre, with an inscription purporting that he was a clever mechanic, ‡

* *Theatrum Basilicæ Pisanæ*, vol. i. p. 7.

† To the architect Buschetto we are indebted for one of the most superb specimens of the Lombard style of building to be found in Italy, a style contemporary with and somewhat similar to the Norman, every where to be met with in England: both are Roman in their arrangement and construction. The cathedrals of this period were, no doubt, built in imitation of the Roman basilicas, by which name many of them are still called. They only differ in their plan by having the addition of a transept, which was adopted by the early Christians to give the figure of a cross to their structures. It was the taste of these times, to acquire magnificence by a multiplicity and littleness of parts, and not by simple and majestic proportions; to produce effect by a gorgeous display of various-coloured marbles, mosaics, gilding, &c. and not by elegant forms.

‡ One of Buschetto's three epitaphs at Pisa: —

Quod vix mille boum possent juga juncta movere,

Et quod vix potuit per mare ferre ratis,

Buschetti nisu, quod erat mirabile visu,

Dena puellarum turba levavit onus.

knowing how to remove great weights with little labour. He left many pupils, whose names are not known. Some practised at Pisa, others at Lucca and Pistoja, where, by order of the republic, then in its zenith, was built the church of St. Martino, which is considered the first in the city.

DIOTISALVI.

His birth-place is unknown, a circumstance much to be regretted. In 1152 he commenced the baptistery of Pisa,* and after eight years finished it. This edifice, which is almost opposite to the cathedral, is a rotunda, surrounded by three steps. It is 100 feet in diameter inside the walls, which are 8 feet 6 inches thick. On the exterior are two orders of Corinthian columns, the lower ones attached to the walls; over their capitals are semi-arches. In the upper order, the columns are more numerous and detached, allowing space to walk behind them, each arch of the lower order having two columns above it.

Over the arches of the second order is an embattled corona, composed of many triangles, or pediments, in each of which is a figure, as well as one at the top. Between these triangles arise little steeples, or pinnacles, all minutely sculptured with flowers, or crockets. Over the second order is a cupola in the form of a pear.† The

* *Theatrum Basilicæ Pisanæ*, vol. i. p. 91.

† This building is covered with a double brick dome, the inner one conical, the outer hemispherical. An aisle is formed round the interior by eight granite columns and four piers, from which spring semicircular arches that support a gallery. Above this are twelve piers, on which rest the semicircular arches that sustain the conical dome. Within the outer wall are contrived two staircases, that communicate with the various

drum is decorated with pilasters, over which is another corona, in the taste of the first. The convexity of the cupola is divided into twelve compartments by crocketed strings which unite at the top, surmounted by a statue of St. John the Baptist; and between these compartments are windows, ornamented with a variety of small columns crowned with pediments and flowers. The whole height is about 170 feet: the cupola is covered with lead and tiles; the rest of the edifice is marble.

On entering, you descend three steps which surround the church. Steps may be used externally, to give majesty to the temple; but to place them within, and to descend, is against all reason, though used here with the intention, as it appears, of making a species of amphitheatre, for the convenience of the spectators, and to enable them the better to observe the ceremonies. Twelve isolated columns form an aisle, over which is another supported by pilasters, also isolated, which are over the columns. From these arches and columns springs the groining. In the centre is an octangular bath, the ascent to which is by three steps. Within the bath are four little wells, and in the middle is the font, having at the top a bronze statue of St. John the Baptist.*

galleries within and without this building. On the ground plan are four entrances, and between each two are five columns, making a total of twenty, that surround the lower story on the outside. Above is a second story of sixty columns, with semicircular arches in the same style as those below; and on this commences the work which somewhat resembles our pointed style.

* In the interior, on piers of the lower story, are inscriptions, stating that the building was erected by Diotisalvi in 1153; and on the wall, 3 feet from the floor of the inner gallery, over the aisle, is the following inscription, cut in the character of the middle ages: "A.D. 1278, ædificata fuit de novo." Here the masonry of the wall differs, and the mouldings of the interior precisely correspond with those of the Campo Santo, known to have been executed under the direction of John of Pisa, in 1278, as a long inscription bears witness. The shields

TIODAS,

AN architect of merit, who built in the ninth century several remarkable edifices in Oviedo, by the order of the king, Alphonso the Chaste, who fixed his residence there.

The first edifices which we have any account of in Spain, after that kingdom was lost to him, is that of Santa Croce, near to Pangas in Asturias, erected by order of the king, Don Tafilas, son of Don Pelagio, and of his wife Froylisba, in 739. This church is of a moderate size, entirely of stone, having arches and vaults, strongly constructed, without any ornament, dark, and having another subterraneous church for the sepulture of the founders, according to the custom of those ages.

A century after, Don Alphonso the Chaste established his court at Oviedo, a city founded by his father, Don Fruela; and there built, according to the design of the architect Tiodas, the basilica of Salvatore, with two other churches at the sides; one to the Madonna, the other to St. Michael. The basilica Salvatore was demolished in 1380, to erect the present cathedral; but the two others still remain. That of Santa Maria is 100 feet wide, divided into three naves, with six arches, all on pedestals. The

which are on the windows of the dome contain the arms of a person who lies buried in the baptistery. Under a flat stone, on which is cut a pointed arch, cusped, resting on columns, with pinnacles, crockets, &c. is a figure of an old man in a cap and gown, and his hands crossed, with an inscription rather mutilated, to the memory of the "operarius," or architect, which bears the date 1396. To this person may be attributed all the work in the pointed style, together with the domes, which were constructed before Brunelleschi was employed upon similar works at Florence.—See *Architectural Antiquities of Great Britain*, vol. v.

great chapel and the two collateral ones, which were finished, are well proportioned, and are adorned with famous marbles. The others still remain with that poor and heavy roof which was placed in the first instance as a temporary covering. That of St. Michael has two pavements, the inferior covered with a strong vault, the more to elevate the superior, and to preserve it from the humidity natural to that country. The ascent to the superior, which is called the holy room, is from the transept of the cathedral, by a flight of twenty-two steps. The first thing to be observed is a hall 20 feet high; from thence you pass through an arched door into another smaller hall, not so lofty; from which you descend by twelve steps to a church ornamented with many delicate works, 25 feet long, and 16 wide, the vault of which, although resting on the walls, appears supported by six columns of different marbles, over which are the twelve apostles, two to each column.

The pavement is a mosaic of different stones, laid in a hard composition. This basilica was dismantled. The small chapel has the same mosaic, but is lower than the rest of the church, as is generally the case with those of Galicia and the Asturias, and is badly lighted.

Tiodas also built the royal palace, ornamented with pictures, which is supposed to be the one now inhabited by the bishop. This edifice is praised by king Alphonso the Great in his chronicles: "*Cujus operis pulchritudo plus præsens potest mirari quàm eruditus scriba laudare.*" It is rare that those works which are praised in writing answer the expectations of the spectator: too generally the description surpasses the reality.

The church of St. Julius, without the walls, is also the work of Tiodas, a magnificent building, and more resembling modern Greek than the Gothic.

None of these buildings now merit the eulogiums be-

stowed on them by the historians of antiquity, though they certainly did then. Tiodas was great for the age in which he lived, as he gave strength and general proportions to his edifices, and ornamented them in various ways. He was distinguished and rewarded by Alphonso I. and his successor Don Ramiro, who gave him the management of two other churches, a little distance from Oviedo.

The largest of these, called St. Maria, is plain, both externally and internally; of a good plan, well proportioned, and so solidly constructed, that it is yet beautiful and entire. The other, St. Michael, is small, being only 40 feet long and 20 wide, but of such beautiful proportions, that all our most famous artists both admire and praise it. Its exterior presents a great diversity of parts: cupolas, large chapels, and belfries, are all looked at with pleasure when separate, and, united, form a beautiful whole. On entering, the spectator is astonished at the lofty vaulted roof, the two flights of steps to ascend to it, and the convenience and uniformity of the windows. The whole building is Gothic, although somewhat of the Roman style. In the transept are twelve marble columns well arranged. On this plan many of the first churches of Spain were built.

VIVIANUS.

(Eleventh Century.)

THE memory of this artist is preserved in the following inscription, which is in St. Peter's of the Mountains, in

the diocese of Astorga in Spain, on a square stone, and in Gothic characters : —

Quem tegit hic paries dictus fuit hic Vivianus,
Sit Deus hic requies Angelicaque manus.
Iste magister erat et conditor ecclesiarum
Nunc in eis sperat qui preces poscit earum.

Among the many churches designed by this master, is that near Pegnalba, of a singular figure. The body is composed of two parallel lines, leaving a space between them of a little more than double the whole width, and its extremities terminate semicircularly. In the centre of the two walls are two large columns, entirely of marble, resting on the wall, from whence springs an arch. Two other similar columns, with arches, are at the entrance of the semicircles : thus the church is divided into two squares. Within the semicircles are altars ; one serves for a chapel, and is vaulted. The door, composed of two arches over three columns, is on one side. The whole of the church, except the semicircular end, which is used as a chapel, is surrounded by a species of close and covered walk, where the monks are interred.

PETER OF USTAMBER,

(Eleventh Century,)

By order of king Ferdinand of Castile, took down the old church of St. John the Baptist, of Leon, and built another of stone, dedicated to St. Isidorus, whose remains were removed from Seville. Within this church is the sepulchre of the architect, a lofty tomb of polished stone, with an inscription, which imports that he also

built the bridge called Ustamber. The same inscription panegyrises the supernatural abstinence of the architect, and makes him famous for miracles.

The Gothic style lasted in Spain till the time of Alphonso the Sixth, under whom a correspondence was opened with France and Italy, when several noblemen and foreign literati settled in Spain. The Gothic liturgy was abandoned for the Roman, French writings preferred to the Gothic; and among so many novelties was, moreover, that of the introduction of German architecture, which was, in fact, another Gothic.

CASSANDRO, A ROMAN, AND FLORINO, A FRENCHMAN,

WERE the two architects appointed to preside over the rebuilding of Avila, which, together with Segovia and Salamanca, remained in a ruined state, in consequence of the continual incursions of the Mahomedans. King Alphonso the Sixth committed the restoration of Avila to his son-in-law, Count Don Raimondo of Borgogna, who, to rebuild and people it, invited from various parts illustrious men, artificers and labourers, of every description. The undertaking was commenced in 1090 by 800 men,—all under the direction of Cassandro and Florino.

ALVARO GARZIA,

BORN in Estella, in Navarre, built in Avila the cathedral, with the tower and fortress, which in ancient times had been the royal palace. These buildings were begun in 1091, and were not finished till sixteen years afterwards. They are built of rock stone, and destitute of any order. There are some fluted columns, of a red colour, the remains of Roman buildings, according to the inscriptions which are on some.

MAESTRO RAIMONDO,

OF Monforte, in Lemos, rebuilt the cathedral of Lugo, for which the bishop, the canons, and the nobles, stipulated, in 1139, to give the architect an annual salary of 200 soldi; and in case of there happening any change in the specie, six marks of silver, thirty-six changes of linen, seventeen loads of wood, shoes and boots as many as he might require, every month two soldi for meat, a quart of salt, and a pound of wax. Maestro Raimondo agreed to this, and undertook to assist in the work every day; but dying before the completion, was succeeded by his son. The cathedral was finished 1177. It has three naves; the side ones are not lofty, as there is a high gallery above them: at the four angles are four towers. It is strongly built, of white marble, well worked, and supported on strong arches.

At the same time lived the two saints following, who practised architecture from a desire of doing good.

ST. GIOVANNI OF ORTEGA,

OF noble birth, the son of Vela Velasquez, was born in Fontana d'Ortunno, near Burgos. To arrange the differences in Castile between the queen Urraca and her husband, Don Alphonso of Arragon, he undertook a pilgrimage to Jerusalem, where he retired to the rigors of Montesdosa, and there built a church, a monastery, and an hospital, still existing under the Jews. He built also a bridge on the Ebro near Longronno, and laid the foundation for another at Nagera; also one near St. Domingo, which he finished, more than 100 paces long, over a river which had in a great degree become stagnant. He moreover filled up a marshy road, and made it so firm that it still remains. In consequence of the number of bridges built by this holy man, it has been said of him, "*Pontifices à ponte faciendo.*" But from the time of that pontificate, in which the Ponte Publicio was built, how many pontificates have there been without bridges!

ST. DOMINGO OF CALZADA

LIVED very retired, and imitated St. Giovanni of Ortega, in repairing roads, in clearing forests, the place of refuge for banditti, in building bridges, embankments, and an hospital, with a church bearing his name.

He introduced the German architecture, improperly called Gothic; in Spain it soon arrived to that beauty of which it is susceptible, as may be seen in the cathedral

at Leon, which is not large, but valuable for its elegance, its proportions, and its simplicity. It has three naves, with chapels, slender pillars, with bold arches, and vaults 125 feet high. The whole is of squared stones, well united, on a massive basement: the architect is unknown.

The twelfth century, under Alphonso VIII., was fortunate in the number of cathedrals erected in Castile, as we shall see hereafter.

F U L B E R T.

(Eleventh Century.)

HE was bishop of Chartres, and being instructed in architecture, undertook the charge and direction of rebuilding (1020) his own cathedral, which had been three times destroyed by fire.* Many kings, princes, barons, and gentlemen, vied with each other in their contributions

* Hist. Manuscrite de l'Abbaye de Saint Père de Chartres. Notice Historique et Descriptive sur l'Eglise de Notre Dame de Chartres, par A. P. M. Gilbert, p. 5, &c.

Bishop Fulbert died 10th April, 1028, and is supposed only to have built the crypt. Thierry, or Theodoric, succeeded him, and continued the work till his death, in 1048. Maud, widow of William the Conqueror, in 1088, covered the nave with lead. The two bell-towers and the grand portal were erected about 1145. The work, which was 130 years completing, was dedicated, 1260, by Pierre de Mincy, the sixty-sixth bishop. The spire and tower was commenced by Jean Texier in 1506, and finally completed in 1514. The choir is enclosed by a stone screen, the work of T. Bovdin, 1612. The windows are glazed with coloured glass, which throw "a dim religious light" around the whole edifice.

to this cathedral, the most solid and beautiful in France at that period.

It is 396 feet long, 101 feet wide, and 106 feet high; its transepts 195 feet long and 36 wide; the great nave 43 feet wide, and the small lateral naves each 20 feet wide and 48 high: and its whole width is 106 feet 7 inches. The transepts have also aisles, and the choir has double ones. Where the great naves intersect the cross nave, are seven chapels, the same height as the aisles, but differing in their opening and depth. The subterraneous vaults, supposed to have been begun by the Druids, contain the same number of chapels, and extend round the church.

MARCO JULIANO

(Twelfth Century)

WAS not an architect by profession, but had great taste and ability in the fine arts. We know nothing more of him than that he founded, at his own expense, an hospital at Venice, of which he was the architect.

BUONO,

AN architect and sculptor of the first class in his time, was employed in 1154, by Domenico Morosini,* doge

* Vasari, *Vite de' piu Excellenti Pittori*, &c. tom. i. p. 248; and *Venetia Descritta* da M. Francesco Sansovino, p. 294, &c.

of Venice, to erect the famous bell-tower of St. Mark. This work has no other merit but its solidity, being well built and piled: and after so many centuries there has not appeared a single crack; a very different fate to that which has usually attended other towers of the same description. It is 330 feet high and 40 thick. It is not known from whence Buono came: we know only that he executed many works elsewhere; in Naples, the Capuan castle, now called the Vicaria, and the castle of Vovo; at Pistoja, the church of St. Andrea; at Florence, he gave the design for enlarging the church of Santa Maria Maggiore, the majestic walls and vaults of which still remain; in Arezzo he built the town-house, with a bell-tower. In the works of Buono there is not so much of that barbarous arabesque as was common at that time.

In 1178 the doge, Sebastiano Ziani, sent for two architects, whose names are unknown, one from Lombardy, the other from Constantinople. The Lombard, who by some has been called Niccola Barattiero, removed from Greece to Venice two marble columns, of extraordinary height, which he erected in the square of St. Mark, between which criminals were executed.

He afterwards built a wooden bridge at Realto, and performed so many other useful works, that the republic assigned him a considerable yearly pension.

The architect from Constantinople rebuilt the church of St. Mark, which is more esteemed for the richness of its material and the delicacy of its work than for its size, being entirely of marble, enriched with precious stones internally, and with gold on the exterior: whence it derived the title of the gilded church. Every part is loaded with sculpture. Under the portico are a quantity of figures, representing the principal workmen employed in the building. Among these is an old man, with his finger on his lip, signifying (as the Venetians say) the architect of Constantinople, who impertinently told the

doge, that, however beautiful the church might appear to the Venetians, it was nothing to what he had it in his power to design.

The plan is a Latin cross, having five naves. There are as many cupolas, of a hemispherical form, with terminations like the church of St. Sophia, at Constantinople. Within and without there are more than 500 marble columns. The exterior portico alone, which has five arches, has two orders of columns, one over the other, amounting to 292. Over this portico is a covered gallery, surrounded by balustrades, or, rather, small columns, to the number of 364, which are carried round the whole exterior circumference of the church. Above this gallery are the four famous horses, of Corinthian metal, which were attached to the arch of Nero, and which the Venetians removed from Constantinople. At the end of the gallery, and corresponding with the five gates of the façade, are five other arches, supported by a number of porphyry columns. These are united together by a variety of friezes, sculptured in festoons and leaves of marble, with various figures; and between the intervals of the arches are niches, in the form of little bell-towers. We must observe that all the arches are round.

PETER DI COZZO OF LIMINA

Is said to have been the architect of that famous saloon in Padua, the largest in the world, which is thought to have been begun in 1172.* In the basement are ninety large piers, disposed in four piles, supporting arches. There are

* Voyage en Italie, tom. ix. p. 30.

the same number of piers on the ground floor, the ascent to which is by flights of four steps; which, dividing on each side, lead to two galleries, 17 feet wide, and the whole length of the edifice: these galleries are supported by columns, and defended by balustrades of marble. The form of the saloon is a rhomboid, parallel to the equator, 256 feet long, 86 wide, and 72 high. It was finished in 1218, and in 1306 was covered with lead, by the advice of the brother, John Agostiniano, who had, as a reward, the first covering, which he used over his own church of the Hermitage, that being previously covered by one of straw. Perhaps this brother added to the saloon the palace of the Anziani and of the Podesta. This great edifice suffered by fire in 1420, and was quickly restored by the two architects Veneti Rizzo and Piccino. It was, in 1756, dismantled by a storm, and again repaired by the celebrated Ferracina, who added to it a meridian, which may be considered equal to the wonderful ancient picture of the signs of the Zodiac and of the planets; but there are, moreover, images of Christ, of the Madonna, of the Magdalen, of St. Paul, the first hermit—all the work of Giotto, restored by Giusto, and designed by Peter of Albano, as is said, of whom there is an honourable memorial in the saloon. It contains many other memorials and statues, of Titus Livius, of Speron Speroni, of Lucretia Orologi Obizzi, of Bianca de' Rossi; and many others will yet be erected by the well-regulated patriotism of so conspicuous a city, for which the writer of this preserves the most tender and affectionate esteem, in gratitude for the education which he there received. It is to be hoped that Padua will yet render herself more illustrious by her new Academy of Science. Admiring its many gifts, it received a noble addition to them from his excellency the Signor Gerolamo Zulian, ambassador of the most serene republic to Rome; a man estimable for his rare endowments both of the mind and the heart: he had

engraven, at his own expense, a large topographical map of Padua, delineated with every possible exactness by Count Stratico, professor of mathematics in the university of Padua.

GULIELMO, OR WILLELMUS,

WAS a German architect, who with Bonano,* a Pisan, commenced, in 1174, the celebrated bell-tower of Pisa.† behind the choir of the cathedral in that city. This edifice is of marble, 177 feet 10 inches in height, circular on the plan, and surrounded by 200 columns, having arches instead of an entablature over the capitals. It cannot boast of beauty in design nor rarity of material, but has a singular inclination of 15 feet‡ out of the perpendicular. Whilst constructing it, the architects were not careful to sufficiently secure by piles the foundation or ground-work; before it was half completed the walls gave way, which obliged them to strengthen the foundation on the inclining

* Vasari, *Vite de' piu Excellenti Pittori*, &c. tom. i. p. 251.

† *Theatrum Basilicæ Pisanæ*, vol. i. p. 130. M. De la Lande, *Voyage en Italie*, tom. iii. p. 165.

‡ The clear lower diameter is 24 feet, and the thickness of the wall 13 feet 5 inches. The upper diameter is 25 feet 5 inches, and the thickness of the wall 9 feet. The lower story on the outside has fifteen half columns attached to the wall. Above are six stories, each formed by a peristyle of thirty columns, with a walk around, between them and the wall, and above these another, which contains the bells, making altogether eight ranges of columns, one above the other, including the ground story. There is a staircase of 293 steps, contrived in the thickness of the wall; and the interior is without floors, excepting one between the seventh and eighth stories.

Tommaso, a Pisan architect, is supposed to have perfected this tower in the fourteenth century. It evidently is the work of different periods.

side with great promptitude. The same thing occurred to the Garisenda of Bologna, though in a less degree; and this being of a square form, clearly shews, in the opinion of many, that the rotundity of the other, in some measure, contributed to prevent its fall. Others think, that the bell-tower was purposely built with this inclination; but an attention to the jambs and the courses of the stones, which are all broken and pendent, will counteract this opinion. Almost all the towers of Pisa, as well as many level lines and supports of the cathedral, also the observatory erected in 1755, incline towards the south, in the direction of the Anio, the soil there being the weakest.

The bell-tower of the cathedral at Rotterdam was also inclined; but an architect has restored it to the perpendicular, by building some additional walls.

SUGGER,

AN abbot of St. Denis, was esteemed one of the most learned men in architecture. He rebuilt, in 1140, the church of St. Denis, near Paris, made magnificent additions to it, and himself wrote the description of it.* The length of this church is 335 feet, and the width, from the middle nave, 39 feet. The vault is of an equal elevation in every part, and supported by slender columns and strings of the same delicacy. It is lighted by three orders of windows, the most lofty of which are 40 palms high, but narrow, and 3 feet distant from each other.

* Many intelligent persons imagine that the chapels of the chevet were constructed by Suggest. William of Nangis says, that Eudes Clement built the church as at present. The author of the little chronicle observes, that in 1231 this abbot renewed a part of the building, and continued his work to the choir, and that Mathew de Vendomme finished the building, 1281. — FELIBIEN, *Hist. St. Denis*, p. 227, &c.

MARCHIONE,

(Thirteenth Century,)

AN architect and sculptor of Arezzo, was selected by pope Innocent III. to erect the church and hospital of St. Santo Spirito, in Sassia, at Rome, afterwards rebuilt by Paul III.; the church of St. Silvester; the tower of the Conti, so called because this pope was of the Conti family; and in Santa Maria Maggiore the chapel of the Presepio, afterwards restored by Sextus V. In Arezzo, his country, he built the parish church and the bell-tower.* The façade had three orders of columns, one over the other. These columns were of various sizes; some very large, others equally small, carved from the top of the base; some wreathed like vines, others placed together two and two; some tied together four and four; and the greater part supporting a species of corbel, representing divers animals, carved with most extraordinary act and caprice. The whole forms an extravaganza void of all proportion.

All the architects of that time had some little knowledge of sculpture, and applied it to their edifices without either judgment or taste. Their merit consisted in whimsical ornaments, and a total neglect of those beautiful proportions and judicious rules so scrupulously attended to by the Greeks and Romans.

* He does not appear to have built much more than the portal to the parish church at Arezzo, as the campanile and the façade, and a great part of the church, were the works of 1300, a period later than his time.—See *Note to Vasari*, vol. i. p. 254.

ROBERT DE LUSARCHE

GAVE the design, in 1220,* for the cathedral of Amiens, which was continued by Tommaso of Charmont, and finished by his son Rinaldo, 1269.

This is decided by an inscription, cut in the pavement of the church, in the centre of a marble compartment, in the form of a labyrinth, where are the figures of these three architects.† The principal nave is 213 feet long, without the choir, which is 153 feet long: thus the entire length is 366 feet. The transverse nave is only 182 feet, and its width 49. The choir, the nave, and the transept, are surrounded by small aisles, 18 feet wide and 42 high, which have also recessed chapels. There are few edifices so beautiful or so large; its only defect is the too great elevation of the roof, which is 132 feet high—a defect common to all edifices of this kind.

ESTIENNE DE BOUVEIL

WAS sent, with ten other master builders, from Paris to Switzerland, to construct the church of the Trinity at Upsal, after the style of that of Notre Dame, at Paris.

* Felibien, p. 205.

† Description de l'Eglise Cathédrale d'Amiens, par Maurice Rivoire, p. 18.

TANCREDI DE PENTOMA

BUILT the public fountain at Aquila, called La Rivera, on which were sculptured ninety-nine heads, all different from each other, and throwing a copious supply of good water from their mouths. The following inscription is still visible:—

Urbs nova fonte novo, veteri
quoque flumine gaudet,
Hoc opus egregium, qui cer-
nit ad omnia laudet.
Non mireris opus, operis mi-
rare patronos,
Quos labor et probitas Aquila
fecit esse Colonos.
A.D. M.C.C.L.X.X.I.I.
Magister Tancredus de Pentoma
de Valva fecit hoc opus.

JEAN DE CHELLES, PIERRE DE MONTEREAU, EUDÉS DE MONTREUL.

TOWARDS the middle of the thirteenth century* these three architects flourished in France. The first built the church of Notre Dame, at Paris, and the portico at the end of the transept, towards the palace of the archbishop.

Peter de Montereau built the Holy Chapel at Vincennes,

* Felibien, p. 208.

the refectory, the dormitory, the chapter-house, and the chapel of Notre Dame, in the monastery of St. Germain des Prez, and the Sainte Chapelle at Paris. All these works are in one style. Although the above-named chapels are small, they are, nevertheless, deserving of admiration for the delicacy and beauty of their general proportions. This architect and learned man died in 1266, and was interred in the chapel built by him at St. Germain des Prez, his effigy being carved on the tomb, with a rule and compass in his hand.

Eudes of Montreuil was much esteemed by St. Louis, king of France, and was taken by him on the unfortunate expedition to the Holy Land, and employed to fortify the gate and city of Jaffa.

On his return to Paris, this architect built a number of churches, by order of the king; among which are those of St. Catherine du Val des Ecoliers, de l'Hôtel de Dieu, de la St. Croix de la Bretonnerie, des Blancs Manteaux, des Mathurins, des Cordeliers, and les Chartreux. He had two wives; one, named Matilda, distinguished for her virtue, accompanied the queen to the Holy Land. He died 1289.

ST. GONSALVO, ST. PETER GONSALVO, AND ST. LORENZO.

THESE three saints and architects*, of the order of Dominicans, lived in Portugal about the 13th century.

The first built at Amaranto, his native place, a stone bridge, and a church which was afterwards dedicated to him.

* Felibien, p. 212.

The other built a bridge of stone near Tui, in Gallicia, the place of his nativity.

And the third also built another, in like manner, called the bridge of Cavez.

PIERRE, AMELIE, GILLES DE STEENE, SALOMON DE GAND, NICHOLAS DE BELLE, LAMBERT DE KENLE, AND THEODORIC.

AMONG the number of monks * who at this time applied themselves to the study of architecture, the most learned were some Cistercian abbots, who built in Flanders the church and monastery of Dunes.

Pierre, seventh abbot of the place, commenced the work with the intention only of repairing the ancient edifice, and making some aqueducts and canals for the convenience of the habitation. But, not finding such repairs sufficient, he undertook, in 1214, the entire rebuilding.

His successors, above mentioned, continued the work with great ardour. Nicholas de Belle surpassed them all in his knowledge and love of architecture, and in the grandeur of the edifices which he erected during his long government of twenty years.

Lambert of Kenle carried on the works, which were completed by Theodoric, 1262. The masons, sculptors, carpenters, builders, artists, statuaries, in short, whatever workmen were wanted to construct and ornament a great building, were monks of the same monastery, which contained altogether 400 priests and lay brothers.

* Felibien, p. 213.

L A P O,

(Died 1262,)

So called by the Florentines,* for an abbreviation of Jacopo, was a native of Germany, and acquired great reputation by the church and convent of Assisi. He divided the church into three stories. The lower one was the crypt, with two churches above, one over the other. That in the middle was level with the ground floor, and was surrounded by a grand portico, which served as a sort of terrace to the upper church, which was approached by a commodious flight of steps. It was in the form of a T, five times longer than broad. The two stories were divided by large stone pilasters, from which sprung strong arches. The crypt was destined to receive the body of St. Francis, and was inaccessible to every one. This building was finished in four years (1218). In Florence, where he died, Lapo built various edifices, of which there remains only a part of the façade of the archiepiscopal palace, and the Bargello palace.

FUCCIO,

A Florentine sculptor and architect,* built the church of Santa Maria at Florence, on the Arno, (1229, as Vasari says,) and finished the Vicaria at Naples, and Castel dell'

* Vasari, tom. i. p. 255.

† Ibid. p. 271. Vita di Niccola e Gio Pisani.

Uovo, begun by Buono. He erected the gate over the Volturno at Capua, and enclosed two parks with walls, for the chace, one at Gravina and the other at Melfi.

NICCOLA OF PISA

ACQUIRED a great name, both as an architect and sculptor. His first work was the Dominican church and convent at Bologna. He erected many buildings in his own country, remarkable for their strength, notwithstanding the lightness of the soil and swampy state of that city. He was extremely cautious in first piling the foundations, he then erected large piers, and upon these raised arches to carry the superstructure. With these precautions he built the church of St. Michelle, and some palaces; but his most ingenious work was the bell-tower of the Augustines.* This edifice† is octangular without, and circular within, having a winding staircase, with an opening in the centre like a well: on every fourth step is a column; the arches which rest on them are distorted, and are continued round in a spiral line with openings to the centre, so that from the bottom you are able to see all who ascend. These sort of staircases are consistent for towers, and where necessity may require them; but it is absurd to introduce them upon a large scale where it is possible to make them in the ordinary way.

This architect built the church del Santo at Padua; in Venice, that of the Minor Brothers; and gave the sketch

* Vasari, tom. i. p. 273.

† For a representation and further description of this tower, see vol. ii. of Morona's *Pisa Illustrata*.

of a design for the church of St. Giovanni in Sienna, and for the church and monastery of the Santa Trinita at Florence; which is simple and devoid of embellishments, but so majestic in its proportions, that Buonarotti frequently contemplated it, and ever with increased pleasure, calling it his lady. Niccola also made designs for the Dominican convent at Arezzo, and St. Lorenzo at Naples, whither he sent one of his pupils, named Maglione, a sculptor and architect, who, besides the work in question, built many tombs and other edifices. Niccola embellished and enlarged the cathedral at Volterra, and the Dominican church and convent at Viterbo. At Naples he erected a church and a magnificent abbey on the plain of Tagliacozzo, in memory of the decisive victory gained by Charles I., of Anjou, over Corradino. Some suppose that the cathedral of Naples was the work of Maglione. It is entirely Gothic; but the great gate, by a certain abbot, Antonio Bambocci, of Piperno, is perfectly grotesque. The church was enriched with 110 antique columns of fine marble, which are no longer visible. For the supposed purpose of embellishing the church, they have been walled round and encrusted with stucco. Such barbarisms have been committed elsewhere, and even in Rome.

Niccola was employed in the church of Santa Maria, at Ovietto, and finally retired to his own country, where he died, but at what time is unknown.

MASUCCIO,

(Born 1250, died 1305.)

A Neapolitan architect and sculptor, completed Castel Nuova and Santa Maria della Nuova, commenced by Giovanni of Pisa. He erected the archiepiscopal palace in the Gothic style; in the church of St. Dominica Maggiore he evinced a better taste, and excelled in the proportions of St. Giovanni Maggiore. Among the number of palaces built by him is that which now belongs to the prince of Colombrano.

MARGARITONE,

AN architect, painter, and sculptor, of Arezzo, after having built the governor's palace and the church of St. Ciriaco, in Ancona, was deputed, in his own country, to execute a design of Lapo's for the cathedral; but the building was nearly stopped in consequence of the money intended for that purpose being expended in the wars between the Florentines and the Arentines. Margaritone lived till the age of 77, overcome with various misfortunes, among which was the vexation of finding his credit diminish in proportion as that of the other professors increased. The greatest fault of old age is having too tenacious a reliance on its own wisdom, and the idea of a total absence of all talent in youth; while it is, in fact, not uncommon to see young men fully qualified to give lessons to their seniors, who are often incapable of profiting by them,—time weakening the mental as well as the corporeal faculties.

MARINO BOCCANERA,

A native of Genoa, commenced the mole there, for the foundation of which he threw into the sea stones of an immense size, taken from the neighbouring mountains. To him is also attributed the wet dock, which had been previously begun by others, and the basin called the Mandrocchio, for the convenience of vessels, as well as some aqueducts. In the year 1300 he enlarged the port, digging it to a depth of 15 feet, and 115 cubits along the shore. This family has produced many illustrious men.

ARNOLFO

(Born 1232, died 1300,)

WAS born at Florence, studied architecture under his father, Lapo, and became the most renowned architect and sculptor of his time. He built the new walls of Florence, and ornamented them with towers. In the same city he formed the square now called St. Michel, the square of the Priors, the abbey and the church of Santa Croce, 482 feet 6 inches long and 133 feet wide, in which is the portrait of Arnolfo, by Giotto. For these and other works, the Florentines were so pleased that they elected him one of the corporation. He afterwards gave a design and model for the church of Santa Maria del Fiore, which is the cathedral of Florence. In 1288 the foundation was laid with great cere-

mony, and with so much judgment and solidity, that Brunelleschi was afterwards enabled, with complete success, to raise the great cupola on them. This cathedral, intended by the Florentines to be the finest in the world, is 462 feet long, the transept 315, and the whole width 70; the height of the middle nave 133 feet, and of the lateral ones 91. The external circuit of the whole church is 2443 feet. It is entirely of stone, and in many parts enriched with marble of various colours, particularly on the exterior. There are two porticoes on the flanks. In the frieze of one are some fig-leaves, well sculptured, which are supposed to be the arms of Arnolfo. This architect shewed some slight glimpses of good taste. The same may be observed of the painting of Cimabue, his contemporary. But in every thing, physical as well as moral, the progress to excellence is by insensible gradations. The corrupt style, called *Gotico tedesco*, was continued for some time after that of which we are now writing.

PIETRO PEREZ

(Died 1290)

Was the architect of the cathedral of Toledo, which has five naves, surrounded by chapels of white stone, 404 feet long, 202 wide, and the principal nave 116 high. It has the same defect of obscurity as that of Burgos.

In the fourteenth century many magnificent works were executed in Spain: the grand cloister of the cathedral of Toledo, the famous bridge of the archbishop over the Tagus, the rebuilding of San Martino, the arsenal of Seville, and many other buildings; the architects of which are unknown.

ROBERT DE COUCY

(Died 1311)

WAS employed, in 1297, to finish the church of St. Nicaise, at Rheims, which was not very large, but esteemed for the delicacy of the work and the proportions. He had also the principal management of the cathedral,* which was rebuilt after its conflagration in 1210. The former church was 420 feet long, 150 wide, 100 high, with two towers 262 feet high, and ornamented with a prodigious number of columns, figures, and every sort of sculpture, particularly in the principal façade.

JEAN RAVI,

AN architect and sculptor, who was employed at Paris, for the space of twenty-six years, in the great church of Notre Dame, which he finished in 1351.†

This Gothic church is the most considerable of France. It is 413 feet long, 156 wide, 198 high, including the towers. The nave is 89 feet wide, of a beautiful elevation, well lighted, and regularly planned. The transept is the same width, and equally beautiful with the nave, which is flanked by double aisles, leading to thirty-five chapels, magnificently decorated. The choir and sanctuary corre-

* Description Historique et Statistique de la Ville de Reims, par J. B. F. Geruzet, tom. i. p. 308.

† Felibien, Vie des Architectes, p. 227.

spond also in style with the rest. Above the double aisles are spacious and high galleries or porches, vaulted with stone. The façade is flanked by two square towers, 204 feet high. The whole edifice is of stone; and it must be remarked that the foundation is on piles. The expense of the whole was increased by the ornaments, which, if they do not produce an interesting whole, present in every part something worthy attention, particularly in painting, sculpture, gilding, marble, bronze, wood, and iron-work.

ERWIN OF STEIMBACH

(Died 1355)

WAS engaged twenty-eight years in building the cathedral and bell-tower of Strasburgh,* which has been since completed, after his designs. Among the specimens of modern Gothic, this is the most stupendous. It is similar in style to that of Rheims and Paris, except the ornaments, which are very minute, and innumerable. The nave and choir are about 120 feet high; the arms of the cross, and the part which flanks the church, are less. The façade is singular; it is about 240 feet high, and the tower, which occupies a great part of it, rises above this immense elevation 334 feet: thus the whole height of the tower, from the ground to the top, is 574 feet. This tower is square, the whole width of the façade, and at the three sides expands into wreaths of fret-work. At the termination it becomes octangular, open on all sides, and has four exterior flights of steps, which are continued to where the principal tower becomes conical or pyramidal, by means of seven steps, and is crowned at the

* Description nouvelle de la Cathédrale de Strasbourg, par François Miler. 6me edition.

summit with a species of lantern. The number of the columns and figures in this edifice, which resembles a pinnacle, is wonderful.

In the interior, near one of the large piers of the transept, is the statue of the architect, Erwin, which appears leaning over the balustrade of the upper corridor and looking at the opposite piers. The ornaments in the frieze of this church shew the taste of the times in which they were conceived. A pig carrying the holy water, followed by a number of other pigs and asses, all clothed in the sacerdotal habit; a procession of apes, a fox enshrined, a nun *accouchée* by the side of a monk, and other similar extravagances, were chosen to satirise the times: but satire does not always produce a salutary effect.

To Erwin succeeded John Hiltz, of Cologne, who continued the tower, which was finished in 1449 by an architect of Suabia, whose name is unknown.

HUALIPA RIMACHI YNCAS,

AN American architect and engineer, who built the fortress of Cusco, the capital of Peru and Chili, which may be esteemed astonishing when compared with other buildings of these kingdoms.

To have a perfect idea of this wonder of America, we must be allowed a digression, which will be grateful to every one possessed of a humane heart.

About the middle of the thirteenth century, Manco Capac became the Romulus of this empire, which he extended in length 1300 leagues; with this difference, that Romulus, sword in hand, and followed by a band of malefactors, proclaimed himself the son of Mars,—while Manco, unarmed, and without partisans, called himself

the Child of the Sun, sent to improve mankind, whom he led like the beasts. He shewed them those arts most useful to man, he employed them, made them more tractable and peaceable, and did not multiply their wants in order to subdue them. He governed with such prudence, and so acquired the good opinion of the barbarians, that they elected him their chief. He afterwards founded the city of Cusco, which in a short time became the Rome of this vast dominion. Universal happiness was the object of his legislation; he encouraged the practice of the useful arts, and the exercise of religion, by which means he hoped this end was to be attained. Idleness was regarded as a public theft; the lame and the blind were employed, either in driving birds from the corn, or in other offices adapted to their capacity. The sciences were discouraged as much as the arts were fostered; the former were considered as conducing to idleness. M. de Fontenelle has observed, that the Americans were happy in not being acquainted with science; like the Spartans, they endeavoured to preserve themselves from that contagion which corrupted their neighbours. America was enabled by these means to surpass even Europe, with all her arts. It is easy to compose such accounts when the art of writing is acquired. "We," said Montezuma, "cannot write, and yet we can record events." Bridges were here raised without a knowledge of that principle of building in water, now practised by Europeans. The Spaniards found in America some extraordinary works, such as stones of a prodigious size raised to a great height without machines. Among the arts agriculture ranked the highest, and the king every year ploughed a field with a golden plough, which then, becoming sacred, was placed in the temple. Military discipline was extremely strict, and the spirit of conquest was always directed by benevolence. Their system of education was equally extraordinary; the youth were but slightly punished, but the greatest severity

was exercised towards the parents, for not having restrained the inclinations of their children at an early age. Thus was known and practised at Peru that important truth, inculcated by the sublime genius of Bacon, of Verulam, that so many laws to reform men would become useless, if care were taken in the first instance to form the habits of infancy. The incas, or kings of Peru, successors of Manco Capac, co-operated to complete this great plan, so favourable to the best interests of mankind.

Cusco was situated in a beautiful plain, at the foot of a mountain, between two rivers. Its form was quadrangular: in the centre was a grand and beautiful square, from whence proceeded four magnificent streets, still remaining, which conducted to the four parts of the Peruvian monarchy. Here was the Temple of the Sun, the ruins of which are still regarded with wonder: the walls are formed of stones 15 or 16 feet in length, porous and irregular in their form, but united so exactly that no opening was left between them. The walls and the roof were externally covered with massive gold. To the north of the city, on the ridge of a mountain, was the famous fortress, the principal architect of which was Hallgia, who had under him three other architects and engineers, Ynca Maricanchi, Acahuanna Yncas, and Callá Cunchuy. This fortress consisted of three parts, one within the other: the centre one was the palace of the incas, the walls of which were encrusted with gold, and engraven with animals and trees, of the natural size. The grass, plants, and large trees in the gardens, were all of gold, of the most exquisite workmanship. There were also beasts of every description, in the same metal; but here gold and stone are not regarded of much value. In this fortress there are stones more than 40 feet in length, removed from a distance of 400 leagues, along inconvenient roads: among them is one so stupendous, that it surpasses all imagination; it was called the stone of weariness or fa-

tigue, on account of the great labour it required to move it. It was the architect Calla Cunchuy who had it brought forty Indian miles; but it could not be placed where it was originally intended. The interior works of the fort were most artfully contrived with secret staircases, and without arches, the Peruvians not knowing how to strike them. Nothing now remains but the exterior walls, which shew that the whole would have stood the test of ages.

There are also the ruins of many edifices, called by the Peruvians *tambos*, the walls of which are of granite, and the stones, which are worked, appear as if they had been rubbed against each other—so perfectly are they united.

There are in one of these *tambos* some faces, the nostrils of which are drilled, and support moveable rings, cut out of the stone. All these edifices were situated along the magnificent street which conducted across the cordillera from Cusco to Quito, a distance of 500 leagues. Another street, of the same length, equally ornamented and convenient, led to another part. The bridges, canals, the spacious streets in every part of the empire, the fortresses,—all were on an immense scale. But it is wonderful such works could have been performed by the Peruvians, who had neither iron, steel, cement, nor mortar; and were so ignorant of mechanics, as to be unacquainted with either the compass, rule, square, or any mathematical instrument, and had neither oxen nor horses. We may, therefore, cease to be astonished at what has been done by the Egyptians, the Chaldeans, the Chinese, the Greeks, or the Romans. It is, however, surprising, that an empire so wisely regulated and governed for three centuries by twelve incas, each of whom was a Marcus Aurelius, should be in an instant conquered and destroyed (1534) by a handful of Europeans, not Turks or barbarians, but Spaniards, guided by Francisco Pizarro, captain of his Catholic majesty:

“ Nous seuls dans ces climats nous sommes les barbares.”

The easy conquest obtained by a few Spaniards over an empire so vast, and possessing so many excellent laws, must not be attributed entirely to the use of artillery and fire-arms, which appeared to these Indians like so much thunder, nor to our cavalry, which were taken for a multitude of centaurs: the principal cause was, that Athualpa, the thirteenth king, the Caligula of Peru, had rendered himself odious, and the people were, for the first time, divided into factions. One bad prince overthrew all that virtue and knowledge that had been acquired by the new world in the course of three centuries. This nation relapsed into a more barbarous state than it was before the time of the incas; it was brutalised and enslaved. Legislation has the power to render noble what is vile, and to strengthen that which is weak; it in some degree resembles chemistry, which transforms iron into steel.

These descriptions are greatly exaggerated; the boasted streets of Peru were but 15 feet wide, and used only by foot-passengers. The bridges were composed of willows, interlaced like a net, and covered with branches of trees and earth: they were elastic, and, of course, unsafe. Every thing was performed by manual labour; and in order to raise enormous masses, they heaped earth against the edifice, which they removed when the work was completed, and the stone was afterwards properly worked.

CHAPTER III.

THE ARCHITECTS OF THE FOURTEENTH
CENTURY.

GIOVANNI OF PISA,

SON and disciple of Nicola of Pisa,* was a sculptor and architect, and acquired a great reputation at a very early period. He erected the Campo Santo of Pisa, a public cemetery, to which are consigned the wretched remains of mortality, it having been anciently forbidden by the council to inter the dead in churches.

This cemetery is a rectangle,† 550 palms long and 160 broad, surrounded by a covered walk, with an open area, like a cloister. The southern side is externally cased with white marble, with forty-four pilasters, also of marble. The ambulatory round is formed by pilasters, on a high plinth, between which are small columns with arches above, filled in with Gothic tracery. The walls are about 29 feet high, and enclose many tombs of illustrious men: they are adorned with paintings, and the roof above is covered with lead. Queen Christina of Sweden named this not a cemetery, but a museum. The uncovered area is divided into three parts, and contains

* Vasari, tom. i. p. 280.

† This quadrangle has not its sides quite at right angles: at the east end the clear width is 136 feet 10 inches, and that of the west 140 feet; the length between the walls on the south side is 415 feet 10 inches, and on the north 430 feet 8 inches.

that holy earth which the fifty Pisan galleys sent to Palestine to assist the Emperor Frederigo Barbarossa, in 1228, brought from Jerusalem.

Giovanni of Pisa was called to Naples, where, by order of Charles I. of Anjou, he built Castel Nuovo—to erect which, he was obliged to demolish the church of the Zoccolanti, which then occupied the site : he afterwards rebuilt it, and it was then called Santa Maria Nuova. On his return from Naples, he erected at Sienna the façade of the cathedral, which is very magnificent ; at Pisa, the great tribune of the cathedral ; and, after having executed many works in architecture and sculpture, at Arezzo, Orvieto, Perugia, Pistoja, and elsewhere, he died full of years and honour, and was buried in the Campo Santo, near his father Nicola.

The plan of the cathedral at Sienna is a Greek cross, 300 feet long and 180 feet wide : it has three naves ; the centre one, and also the transept, supported by fascies, each composed of four small columns. Those which face the great nave are very lofty, and have their capitals above the cornice, the great projection of which conceals a part of them. The small columns serve as imposts for the lesser arches of the great and lateral naves. All the arches were originally pointed, but have since been made circular. Edifices should be left as originally built, be the style what it may : they serve as histories, and enable us to compare modern works with those of posterity. To the chapels of the small naves have since been placed some heavy circular frontispieces, which look as well in this cathedral as a cardinal would do among the Sarmatians. The façade is richly ornamented ; it has three doors, between columns of admirable sculpture, among clusters of pilasters, with a mass of capitals on them : over each door run a number of bands, above which rises an embattled pediment, the top of which cuts an entablature of bad style, which is in the centre of

the façade. At the extremities are two pilasters, supporting horses and oxen, over which rises a bell-tower, formed of small columns or pilasters, with very narrow openings, and crowned with pyramids or small towers, embattled. Corresponding and over the middle gate, are raised two other bell-towers, similar, but higher. Between these four towers are three triangular pediments, embattled, with statues on the top. Over the two lateral fronts are five pointed arches, supported by as many isolated small pilasters.

GIOTTO

(Died 1334)

WAS born in Vespignano, a villa in the vicinity of Florence : he shewed so great an inclination for the arts, that at the age of ten years he amused himself by drawing on stones or on the sand, whilst in the occupation of a shepherd. Cimabue found him in the act of drawing a sheep on a stone which he had polished with a piece of rock. The artist, astonished at such an instance of genius, by his father Bondone's permission, conducted him to the city, and instructed him in painting, in which Giotto made such progress, that he soon far excelled all the painters that had preceded him for many centuries. His reputation increased, and he acquired honour and riches. He also became an excellent architect, and superintended many considerable edifices ; among them is the bell-tower of Santa Maria del Fiore, for which he made both the design and model. This tower* is square ;

* The clear internal dimension on the ground plan of this tower is 21 feet 1 inch, and the thickness of the walls 10 feet 8 inches. At each

each side is 25 braccia long. Its height is 144 braccia, but it does not terminate, according to the original design, in a species of quadrilateral pyramid, 50 braccia high; this termination appearing to those who completed it barbarous and Gothic. Giotto had a penetrating and powerful intellect. While at Naples, painting for king Robert, he was commanded to draw a picture of the kingdom of Naples. Giotto painted a saddled ass, smelling at a new saddle which lay on the ground, which he appeared desirous of having on his back, instead of the one already there. The king saw the drift of the painter, and acknowledged that it contained some truth.

AGOSTINO AND ANGELO OF SIENNA

WERE two brothers, and the most illustrious disciples of the school of Giovanni of Pisa. Their ancestors were also architects of the twelfth century. Agostino, in 1308, made a design for the palace of the new magistrates, who then governed Sienna; and thereby acquired so much reputation, that he and his brother Angelo were chosen to superintend the public edifices of the city. They erected the northern façade of the cathedral, made two new gates to the city, began the church and convent of San Francisco, and the church of Santa Maria, in the

angle, on the outside, is a half-octagon, which continues to the top: there is a staircase within the thickness of the wall, which communicates to the five stories and the roof. The whole height, from the pavement to the top of the parapet, is 280 feet 2 inches. The cornice which supports the parapet is very bold: the whole of the exterior is of Gothic design, and inlaid with marble and mosaic, and may be considered one of the finest specimens of campanile in Italy.—See *Descrizione di S. Maria del Fiore, da Bernardo Sansone, Sgrilli. 1733.*

square of Manetti. They erected the great fountain in the square before the Hôtel de Ville, the Hall of the Grand Council, and finished the tower of the Public Palace. In Assisi, in Orvieto, in Arezzo, and in Bologna, they executed various other works in architecture and sculpture. The precise time of their death is unknown.

Giacomo Lanfrani, their pupil, erected the church of San Francisco, in Imola ; and in Venice, that of St. Antonio.

ANDREA OF PISA,

(Born 1270, died 1345,)

WAS an excellent sculptor and architect : he made the design for the castle of Scarperia, built at Mugello, at the foot of the Apennines. To him is also attributed the design and the model of the church of San Giovanni, begun at Pistoja in 1337. This edifice is a rotunda, and well constructed for those times. But what conferred most honour on Andrea, were the works which he erected at Florence, by order of Gualtieri, duke of Athens, who then governed that city. He fortified and increased the ducal palace, which was afterwards divided into many others ; he surrounded Florence with towers and magnificent gates ; and also made the model for a small citadel, which would have been built in the quarter of San Giorgio, but for the expulsion of the duke from Florence. Andrea was held in great estimation by the Florentines, who elected him a citizen, loaded him with riches, and raised him to the magistracy. It is said he made the design for the arsenal at Venice.

Among his pupils in architecture was distinguished

Tommaso of Pisa, by some supposed to have been his son. He finished the chapel of the Campo Santo, or cemetery, and the bell-tower of the cathedral at Pisa.

TADDEO GADDI, A FLORENTINE,

(Born 1300, died 1350,)

EXCELLED in architecture and painting both Giotto, his master, and Andrea of Pisa, in concurrence with whom he undertook a number of important edifices. He restored the foundation of the Loggia, now called San Michele, and over these loggi, or galleries, built vaulted magazines for public granaries. He rebuilt the old bridge, 48 feet wide, 24 for the passage, and as many for the shops, of which there were twenty-two on each side. In this work nothing was spared that could add to its solidity or beauty; it cost sixty thousand gold florins. He also repaired the castle of San Gregorio, finished the bell-tower of Santa Maria del Fiore, and executed various other edifices.

STEFANO, CALLED MASUCCIO THE SECOND,

(Born 1291, died 1388,)

WAS a disciple of the before-mentioned Masuccio, but more correct in his style of architecture. While at Rome studying the various monuments of antiquity, he was

called to Naples by the king, Robert, to erect the church of Santa Chiara ; but being prevented from an immediate attendance to the mandate, the edifice was commenced in the Gothic style, to the great vexation of Masuccio ; and it is to be regretted that a style so redundant in gilding, stuccoes, &c. should ever be preferred to one of a purer and more simple character. The work in question cost 100,000 ducats, and was under the direction of the engineer D. Giovanni del Gaizo, who has certainly produced an effect calculated to please the vulgar, but not to satisfy the taste of the more refined.

Giacomo de Sanctis was a disciple of this Masuccio : he died in 1435, after having built various palaces at Naples : amongst which, that of Balzo, in the piazza of San Domenico Maggiore, now Il Banco del Salvatore ; it has been modernised externally, and is now neither ancient nor Gothic. He also built the church of Santa Maria delle Grazie, near San Agnello, the church and monastery della Croce de Palazzo, the magnificent Carthusian monastery of San Martino, and the castle of San' Elmo. He finished the church of San Lorenzo, which had been begun by his master, built the church of San Giovanni, at Carbonara, and a number of sepulchres ; being both sculptor and architect, as was usual at that time. The bell-tower of Santa Chiara is his work, and was intended by him to serve as a specimen of the five orders of architecture. It was to have had five stories : the first, Tuscan ; the second, Doric ; the third, Ionic ; the fourth, Corinthian ; and the last, the Composite. But this immense tower still remains at the third order. It is perhaps worth observing, that the Ionic pilaster of this edifice has the necking a module below the capital, as was practised some time after by Buonarotti.

ANDREA OF CIONE ORGAGNA,

(Born 1329, died 1389,)

AN architect, painter, sculptor, and poet of Florence. His designs were preferred before many others for the enlargement of the piazza, which the Florentines intended to make before the Palace, with porticoes, galleries, and a mint ; and to him was entrusted the whole management of the work. The loggia, entirely of stone, open at the two sides, was built with great care ; and instead of the pointed arches, which had been so universal, had semicircular ones, turned with grace and elegance. Between the arches of the front façade were seven figures in half-relief, alluding to the cardinal virtues. Buonarotti was so much pleased with this loggia, that when asked by Cosmo I. for a design for the senate-house, he answered, that he should only continue the loggia of Orgagna round the square, as he could never produce any thing superior. But the work having already cost 86,000 florins, the prince was discouraged at the expense, and relinquished his intention. This loggia was unfortunately situated to the north, and in the winter was inaccessible from the great winds. It had a tabernacle, or chapel, to receive an image of the Virgin, which was small, and in the Gothic style, but curious for the work, and the extraordinary manner in which the marbles are united, neither mortar nor cement being used, but iron cramps covered with lead. This great artist was respected for his moral qualities, and for his easy and agreeable manners, which gave him a superiority over all his contemporaries.

His brother, Jacapo, an architect and sculptor, built the tower and gate of San Pietro Gattolini at Florence.

WILLIAM OF WYKEHAM,

(Born 1324, died 1414,)

WAS born in the village of Wykeham,* and was from a youth so much esteemed in the university of Oxford, that king Edward III., knowing him to be learned in the belles lettres, philosophy, and mathematics, and being moreover attracted by his majestic figure, took him into his service, and employed him successfully in many political affairs. Wykeham, being well versed in architecture, was made by the king superintendent of the royal edifices and of the fortresses. He made the design for the palace at Windsor, which was finished in three years. Some invidious persons endeavoured to draw the monarch's displeasure on him for an equivocal inscription in the palace, but were unsuccessful. Being made an ecclesiastic, he acquired a number of benefices, and became secretary of state, keeper of the privy seal, bishop of Winchester, high chancellor, and finally president of the privy council. But the sun of his prosperity was soon overshadowed, which is not uncommon with the favourite of a court; he was stripped of all these riches, and persecuted. He retired to his bishopric, and there founded a college after his own design, and designed and founded a similar one at Oxford. He was afterwards restored to his situations; but he preferred a total retirement, and lived really like a bishop, that is, in the exercise of benevolence. He built, according to his own plan, a magnificent cathedral at Winchester, which was little inferior to St. Paul's at London. Notwithstanding his beneficence towards the poor, he was accused of various misdemeanours, but declared innocent by the parliament.

* See his Life, by Robert Louth, D.D.

GIOVANNI FRANCH,

A Spanish architect, who constructed the tower of the cathedral at Valencia, which was begun in 1381, and finished in 1414: this work was entirely of square stone, of a rectangular figure, 207 palms high, its circumference being the same.

To Milizia's account of the architects of the middle ages, may be added the names of some of the prelates and bishops who superintended, and probably gave the designs for those religious buildings in England, so much admired for their solidity, majestic proportions, and beautiful construction. It is to be regretted that we are not more fully informed of the manner in which these works were conducted; as more mathematical skill is practised in the tower and spire of Salisbury and Louth, in the stone roof at King's College chapel, Cambridge, and in Henry VII.'s chapel at Westminster, than in any of the boasted buildings of Greece or Rome.*

* To the architect there are no studies equal in point of value to what our buildings of the middle ages afford; and the whole profession will ever be indebted to the indefatigable exertions of Mr. Britton, who has brought so many fine specimens to notice — represented in a manner which confers honour on the country and the arts; it is to be hoped that he will be long blessed with health, and encouraged to continue his labours, not ceasing until every fragment of our national architecture is engraved. The collection he has made to illustrate the biography of English architects is very considerable; and at some future time may be expected from him

Previous to the Norman Conquest, in 1066, we have few or no remains sufficiently authenticated to enable us to name the builders. The Norman style introduced into England at that period consisted of semicircular arches, resting on round, square, or polygonal pillars, low towers, with a total absence of pediments or pinnacles. The doorways were generally highly decorated with zig-zag ornaments, large tori or rounds, with animals on the outer edge, embattled frets, billets, and other mouldings. The doors were sometimes square-headed, and the tympanum of the arch filled with sculpture. The windows had no mullions, and the capitals of the piers or shafts were rudely carved with various grotesque devices.

In the eleventh century, Gunduph built the nave, west front, and ancient chapter-house belonging to the cathedral at Rochester, as well as the keep of the castle; Simeon commenced the present cathedral at Ely; Archbishop Lanfranc that of Canterbury; William de Carilepho began the church at Durham, which was completed by Ralph Flambard, in the most costly style practised by the Normans; Remigius rebuilt the cathedral at Lincoln; Walkelin constructed a great part of that at Winchester; Elphage repaired Bath Abbey church; Robert Losing completed the choir and part of the nave at Hereford, and Raynelm the rest of the church; Herbert Losing was employed at the same time at Norwich, where he built the east end choir and ailes of the cathedral; Walter commenced a new church at Evesham; Wlketellus began to rebuild the abbey of Croyland, which was restored by Ingulphus after a fire; Paulinus rebuilt the church at

a complete work upon this subject, which will form a desirable appendix to the present. In the five volumes of his "Architectural Antiquities," will be found many names and anecdotes chronologically arranged; and in the "Cathedral Antiquities," most of the works referred to in this catalogue, beautifully represented.

St. Albans, as well as most of the other buildings attached to the abbey; Baldwin built the church anew at St. Edmundsbury.

In the twelfth century, William Warlewast built the towers, and Quivill the Lady chapel, at Exeter; Peter de Liea restored the cathedral of St. David's; Earnulp erected the dormitory, refectory, and chapter-house at Rochester; Gilbert de Glanvill erected a new cloister at the same place, and built an episcopal palace and a mansion at Lambeth; Pudsey commenced a chapel at the west end of Durham cathedral, dedicated to the Virgin; Hugh de Grenoble erected the choir, eastern transept, and chapter-house, at Lincoln; Roger de Clinton re-edified and greatly augmented the cathedral at Lichfield; Godfrey de Lucy rebuilt the east end, and the Lady chapel, at Winchester; archbishop Roger built the crypt at York; Robert de Betune erected the north end of the great western transept at Hereford; Urban began to rebuild the cathedral at Landaff; Everard the nave and aisles at Norwich; at Ely, Richard completed the east end; Geoffry Ridel continued the work and tower; Eustachius built the galilee at the west end, founded the presbytery, finished the great western tower, and built the greater part of the palace; at Salisbury, Richard Poore commenced a new cathedral; Robert Bingham, his successor, continued the work; at Peterborough, Abbot de Saiis began to rebuild the cathedral, which was completed by Martin de Bec; William de Waterville remodelled the abbey, altered the choir, added the cloister, and founded the chapel under the middle arch of the porch; Benedict rebuilt the nave from the lantern to the porch; at Canterbury, William Senensis, a professional architect, was employed; he began the present choir and aisles, which were finished by William Anglus, who also built the eastern transept, Trinity chapel, and Becket's crown; at

St. Albans, Richard built a chapel; Geoffry erected a large and noble hall, and various other chambers; Ralph built the abbot's apartments, and Robert de Gorham covered the greater part of the church with lead; at St. Edmundsbury, Anselm built St. Andrew's chapel, repaired the west front of the church, and leaded the roof; he also rebuilt St. James's church.

Before the latter end of this century, a strange mixture prevailed in the buildings which were then going on, pointed arches being introduced with the circular ones. At the commencement of the thirteenth century, a magnificent and beautiful style of building, called the lancet or pointed, grew out of this, and was practised throughout England. The arches, pointed like a lancet, rested on clusters of slender detached pillars of Petworth marble, having quatrefoil mouldings, and groining of a light and simple design. Statues, of tolerable good workmanship, on pedestals, were placed in niches, with plain canopies. The windows, towards the latter end of this century, were made wider, and divided by mullions into many bays or days; their heads were curiously diversified with tracery work. Pinnacles, ornamented with crockets and finials, were placed on the tops of the flying buttresses, which were now made more conspicuous, and the central and western towers were surmounted with a spire.

In the thirteenth century, Joceline Troteman restored the cathedral at Wells; at York, Walter de Grey built the south, and John le Romaine the north transept, together with a part of the nave; Engidius de Braose erected the middle tower at Hereford; at Norwich, Suffield built the Lady chapel, Walpole the tower, part of the cloister, and chapter-house; at Durham, Prior Melsonby, Bertram Middleton, and Hugh of Darlington, erected the central tower, Bishop Poore vaulted the nave, and Prior Hotoun the choir; at Lincoln, the nave, great transept; and the lower

part of the centre tower, were performed by Hugh de Wells and Greathead, who also built the galilee; Walter de Langton vaulted the roof and founded the Lady's chapel at Lichfield; Walter Bronescombe finished St. Gabriel's chapel at Exeter; Thomas Becke laid the foundation of the Lady chapel at St. David's; Prior William de Hoo rebuilt the choir at Rochester; Nicholas de Aquila and Richard Poore rebuilt a great portion of Chichester cathedral; at Peterborough, Robert de Lindsey glazed thirty windows, Walter St. Edmonds finished the west front and its short transept, and probably roofed the nave, Richard of London erected one of the west towers, and William Parys built the Lady chapel; Henry de Estria erected the admirable screen at the west end of the choir at Canterbury; at Worcester, W. de Blois altered and improved the nave, and William de Bedeford erected the deanery; at Croyland, Richard of Bardney rebuilt the north aisle, Ralph de Marsh repaired the west front, with the towers, and rebuilt the tower beyond the choir, and St. Martin's chapel; John of Hereford built a noble hall at St. Albans, which he covered with lead, added also many chambers to the abbey, with chimneys; Simon de Luyton erected St. Mary's chapel at St. Edmundsbury.

In the fourteenth century, the niches became gorgeous tabernacles, and were filled with statues, of beautiful execution. The ribs supporting the groined ceilings, hitherto simple intersecting arches, branched out into tracery of various devices, and the intersections were concealed or covered by a boss or architectural knot. The arches of this period were generally well turned, and properly proportioned; they were invariably adorned with one or more cusps on each side of the head, so as to form trefoils, cinquefoils, &c. The pediments raised over them were purflled or crocketed; the sweeping cornices descended as low or lower than the springing of the arch, and gene-

rally rested on the busts of bishops, kings, or other founders or benefactors. During this period, H. Wakefield united the nave and west end at Worcester, and Thomas Cobham vaulted the greater part with stone; at Wells, Harewell built the south-west tower; at York, Archbishop de Melton completed the nave and west front, and Thoresby began the choir; at Norwich, Salmon finished the south walk, and Henry de Well the north side of the cloister, Percy built the spire and repaired the tower; at Durham, Hatfield erected the episcopal throne, the great hall of the palace, and the screen to the high altar; John Kirby completed the chancel and east end of Carlisle cathedral; at Winchester, William de Edyngton commenced rebuilding the nave, which was completed by William of Wykeham; Abbot Knowles began to rebuild the present cathedral at Bristol; Walter Stapledon and John Grandison erected the choir and nave of Exeter; Henry Gower put up the rood-loft at St. David's; John Langton built the spire at Chichester; Aban de Walsingham built the octagon and lantern at Ely, but it was completed by Simon de Montacute; at Canterbury, archbishop Sudbury re-edified the western transept, and prior Thomas Chillenden built the nave, cloisters, and chapter-house; Richard began the new church towards the east at Croyland; Exeter cathedral was groined, and its heavy Norman work changed into the light and elegant pointed architecture, by bishop Grandison.

In the fifteenth century, the arch became more depressed, the windows were more numerous and enlarged, and the stone-work was covered with a redundancy of ornament. The ribs of the vaulting were loaded with armorial bearings, badges, rebuses, and pendants. The buttresses were crowned with hemispherical cupolas.

Bishop Alcock built the beautiful chapel called after his name at Ely; at Peterborough, Richard Ashton erected

the new building at the east end, and Robert Kirton made a bow window in the great hall, and constructed a chamber in his house, which he called Heaven's Gate; at Canterbury, Thomas Goldstone built the south-west tower and porch, together with the dean's chapel; Edmund Lacy built the chapter-house at Exeter, and John Booth erected the throne at the same cathedral; bishop Dean built the choir at Bangor; Robert Tulley put up the stalls at St. David's; William Heyworth completed the cathedral at Lichfield; Silkested built a chapel at the east end of Winchester cathedral; bishop King rebuilt the present Bath Abbey church, and bishop Beckington the buildings which constituted the dwellings of the monks; abbots Newberry and Hunt rebuilt the roof and aisles of Bristol; Thomas de Beckington erected the throne, part of the cloisters, and chapel of the Virgin, and bishop Bubwith the north-west tower, at Wells; Stanbury and Audley erected two chapels at Hereford; bishop Marshall decorated the cathedral at Landaff with an altar-piece of free-stone; at Norwich, the roof of the nave and stone screen were executed by bishop Lyart, and the stone roof to the choir by bishop Goldwell; Clement Litchfield built the high square tower at Evesham; at St. Albans, John de Whethamsted built a small chapel and many of the windows; John Stock, or Stoke, who built the divinity school at Oxford, and the library over it, new glazed the cloisters, &c., William Wallingford erected the rich and costly front of the high altar, and a chapel and tomb, in the south part of the church; at St. George's chapel, Windsor, Sir Reginald Bray is supposed to have acted as architect, as well as to Henry VII.'s chapel at Westminster.

In the sixteenth century, bishop Skeffington completed the church at Bangor; Edward Vaughan built the beautiful chapel of the Trinity at St. David's; prior Senhouse erected the square tower of the priory at Carlisle; bishop

Fox built the east end and Lady chapel at Winchester ; abbot Newland erected the gate-house at Bristol ; bishop Booth the north entrance or porch at Hereford ; bishop Nix the stone roofs of the north and south transepts at Norwich ; prior Goldstone and Selling raised the centre or bell Harry tower at Canterbury ; Cardinal Wolsey founded Christ College, Oxford, &c. &c.

OF THE
MODERN ARCHITECTS.

BOOK III.

OF THE ARCHITECTS FROM THE RE-ESTABLISHMENT OF
ARCHITECTURE IN THE FIFTEENTH CENTURY TO THE
EIGHTEENTH CENTURY.

CHAP. I.

OF THE ARCHITECTS OF THE FIFTEENTH
CENTURY.

FILIPO BRUNELLESCHI, A FLORENTINE,

(Born 1377, died 1444,)

A son of Lippo Lapi, was educated for the profession of a notary, which was his father's, or that of a physician, his great-grandfather's; but being ardently attached to mechanical pursuits, he was placed with a goldsmith: he then practised sculpture, and afterwards studied perspective, which was at that time entirely neglected, and by the strength of his genius its principles were materially improved: he studied geometry, read the sacred writings and the works of Dante: finally, he applied himself to architecture, and learnt much from the church of San Giovanni at Florence, which is built in a good style, and

very nearly approaching to the antique : but of far greater importance to him was the attention he paid to the ancient monuments of Rome, the best of which he measured and sketched with great accuracy. To him is attributed the glory of having first revived the three ancient orders, the Doric, Ionic, and Corinthian. How this agrees with what has been said of the bell-tower of Santa Chiara at Naples, built of the five orders by Masuccio II., the Tuscans and Neapolitans may decide, who are always claiming the glory of an invention from one another.

Brunelleschi conceived the idea of raising a cupola over the church of Santa Maria del Fiore at Florence, and went to Rome with a view of improving his knowledge on the subject, when his mind became so absorbed, that he scarcely allowed himself the rest which nature required, and was in such want of money, that he pawned his jewels to obtain the common necessities of life. He then returned to Florence, and secretly made the designs and models for his cupola, but did not shew them to the deputies of the building, having had sufficient proofs of their ignorance, from the manner in which they generally conducted business. He simply stated his opinion, and set off again to Rome : as he expected, he was soon entreated to return to Florence, which he did immediately. He asserted that he could raise the cupola without any difficulty ; but first wished that the most eminent architects and engineers in Italy and Europe should be invited to offer their sentiments on this important affair. His wish was complied with ; and Brunelleschi went to Rome for the third time, to compare his design with the best models of antiquity. In about a year there were collected at Florence, at a great expense, artists from all nations, as if it was intended to make a cupola for the whole terraqueous globe ; and Brunelleschi being returned from Rome in 1420, a great assembly was called, consisting of the deputies or commissioners of the works, and of the

most learned and ingenious citizens. The extravagant and ridiculous opinions started at this meeting, will not appear strange to those who are acquainted with the darkness which then covered Europe. Some projected piers, with arches over them, to support the beams for carrying the weight; others were for making one single pillar in the centre, and conducting the work after the manner of a tent. There were not wanting those who proposed forming a mound of earth, in which various pieces of money should be thrown, over which the cupola should be vaulted: as soon as the work had acquired the necessary solidity, the people were to receive permission to dig for the money, on condition of carrying away all the earth; thus leaving the cupola complete. That the Pantheon at Rome was built in this manner, is one of those follies which had gained credit for some time. Brunelleschi was of opinion that the work was to be done without any of these contrivances. He was, however, treated as a madman, and turned out of the assembly. He continued firm in maintaining that he could raise this mass with a double vault, so as to be able to walk between the two with staircases, lights, and passages. This assertion only drew on him the most bitter jests and taunts. He would not produce either model or design; but to turn the laugh on his adversaries, he made use of a stratagem practised towards the end of the same century by Christopher Columbus. He proposed to make an egg stand upright on a table. All present tried, but not one succeeded. Brunelleschi, striking off one end of it, performed the miracle. "We can do likewise!" was the universal exclamation.—"You will say the same when you have seen my model," replied Brunelleschi. At length, after a multitude of objections, of fears, and doubts, he was commissioned to raise the cupola, but only to the height of 22 feet, as an experiment. An architect called Lorenzo Ghiberti was appointed his colleague. At this affront,

Brunelleschi lost his patience ; and, but for the interference of his friends, would at once have abandoned models, cupola, and Florence. He at length began the work, and soon afterwards feigned illness, that the workmen might receive their orders from his colleague : the latter, not knowing how to conduct it himself, plainly shewed his ignorance, and thus Brunelleschi remained sole director. As they proceeded, much time was lost : to repair this inconvenience, the architect erected small eating-houses on the building, supplied with whatever the workmen might require ; thus removing the necessity for their descending.

Brunelleschi completed his undertaking, which surpassed in height any work of the ancients. The lantern alone remained imperfect ; but he left a model for it, and always recommended, even in his last moments, that it should be built of heavy marble, because, the cupola being raised on four arches, it would have a tendency to spring upwards, if not pressed with a heavy weight. The three mathematicians who have written on the cupola of St. Peter's, have demonstrated a truth differing from that which Brunelleschi believed : viz. that the small cupola increases, in a great degree, the lateral pressure. The whole height of the structure,* from the ground to the top of the cross, is 385 feet ; that is, to the lantern, 293 feet, this latter being 68 feet 6 inches ; the ball 8 feet ; the cross 15 feet 6 inches,—this,† as well as the portico which was to surround the drum, was never completed. Baccio d'Agnolo commenced a part of it in marble of Carrara ; but it was not continued, Michael Angelo having said that it appeared to him to resemble an iron cage.

* *Descrizione di S. Maria del Fiore*, da Bernardo Sansone Sgrilli, Architetto. In this work are plans, sections, and dimensions of the church, in its present state, together with an historic description, in which it is said the dome was commenced in 1420, and finished in 1435.

† The plan of this dome is octangular : each side in the interior is 57 feet, and the clear width between the sides, not measuring into the

It is difficult to imagine why the cupola of Florence should have been so much thought of, when those of St. Sophia at Constantinople, of St. Mark at Venice, and of the cathedral at Pisa, had been already executed. It is true that they are not double, and are supported by arches, on four piers; whereas, that of Brunelleschi is erected entirely on the walls, and is octangular. What is particularly observable in the construction of this cupola, is, that there are no apparent counterforts.

Brunelleschi was called to Milan, by the duke Filippo Maria, to design a fortress, and on his second return he performed many works, not only for the duke, but at the famous cathedral of that place. At Fiesole, by order of Cosmo de' Medici, he built the abbey of the regular canons, on an extremely convenient plan, making it very ornamental and magnificent. From an inscription, we learn that Cosmo spent 100,000 crowns on this edifice.

Brunelleschi was also well acquainted with military architecture, and designed the fortress of Vico Pisano, the old and new citadel of Pisa, fortified the Ponte Amare, and made the model for the fortress of the gate of Pesaro.

He also built a great part of the church of St. Lorenzo * at Florence, 259 feet long in the interior, and full of many

angles, 137 feet; the walls are 16 feet 9 inches thick; the whole length of the church is nearly 500 feet. The nave has four pointed arches on each side, on piers, separating it from the side aisles. The transept and choir have no side aisles, but are portions of an octagon, attached to the base of the dome, giving the whole plan the figure of a cross. The edifice has a Gothic character, and is incrustured with marble and mosaic work.

* In this church there are seven columns on each side of the nave, which separate it from the side aisles and their chapels. The clear width between the columns is 37 feet, and between the walls, including the side aisles, 82 feet: the length of the nave to the centre of the pier of the transept is 179 feet 8 inches; across to the corresponding pier

errors, produced from envy or ignorance on the part of those who succeeded this able man. The pilasters on the steps have their bases higher than those of the columns, which are on the same level; a fault which might easily have been remedied, by placing under the base of the columns a plinth sufficiently high to have come level with those of the pilasters.

Cosmo de' Medici commissioned Brunelleschi to make him a design for a magnificent palace. No order could be more agreeable to the architect, an opportunity being afforded him of displaying his talent. He devoted himself entirely to it, and made a large and beautiful model for the palace, to be erected in a great square near St. Lorenzo. But the design appeared too sumptuous to Cosmo, and, fearing to excite the envy of his fellow-countrymen, he declined carrying it into effect. This so enraged Brunelleschi that he broke the model to pieces.

He was still more unfortunate in the church degli Angeli, which was commenced on a whimsical design. For want of money, this building was only carried up to the entablature. It is uncovered, and nothing is to be seen within it but the grass and vines which cover the walls. The design is preserved in the monastery de' Camaldosi at Florence.

40 feet 5 inches; and the depth of the chapel beyond 39 feet; making a total length of 259 feet 1 inch. The length of the transept, including the chapels at each end, is 171 feet. The columns of the nave are 2 feet 9 inches in diameter; their height, including base and capital, 28 feet; the entablature, which rests on them, is connected by semicircular arches, over which is a continued architrave, frieze, and cornice, 6 feet high, the top of which is 50 feet 7 inches from the pavement. Above, is an attic 20 feet in height, lighted by semicircular-headed windows, one over each intercolumniation. The ceiling of the nave is flat, and divided into coffer. Each of the four friezes of the lower entablature has on it a bas-relief of a lamb on a gridiron, enclosed in a wreath, between two cherubim, — probably alluding to the martyrdom of St. Lawrence.

He had, however, an opportunity of signalling himself in the noble Pitti palace, which he raised to the window of the second story.

This edifice is entirely of rustic work. The windows of the first story are arched; they have since been ornamented by Ammanati with elegant mouldings and triangular pediments. Between these windows are others more simple, placed a little above them. In the second story are twenty-three windows, without any ornament, with round holes in the centre of the archivolt, and a continued balustrade before them. There then rises in the centre a third story, likewise rusticated, which has seven windows, and on each side a balustrade, with statues at the extremities. The doors are 28 feet high and 14 feet wide, the windows being in the same proportion.

At this time there was shewn, in the church of Santo Spirito at Florence, a representation of Paradise. Above, was a sky full of moving figures and an infinity of lights, appearing and disappearing in an instant. This ingenious work, of which Vasari gives a long description, is attributed to Brunelleschi. He gave also the design for the church and convent of Santo Spirito, which were to be rebuilt. The church is 296 feet in length in the interior, and 84 feet 3 inches wide, clear of the niches; well arranged, rich in columns and other ornaments, light and elegant; and had his design been followed in every particular, would have been very beautiful.*

* The plan of this church is exceedingly well arranged, and consists of a nave, transept, and choir, with side aisles entirely round the building, together with forty large niches, containing thirty-eight altars, one being placed opposite to every intercolumniation. At the junction of the cross, four piers sustain a brick dome, pierced with circular windows. The general style and character of this building resembles that of St. Lorenzo; the columns are 2 feet 9 inches in diameter; the height, including their architrave, frieze, and cornice, is 31 feet 5 inches; the second, or continued entablature, above the semicircular arches, is 11 feet 6 inches

The fame of this great artist extended itself, and every one solicited his designs. He erected some embankments on the Po, for the marquess of Mantua. This prince used to say, that Florence was as worthy of having Brunelleschi for her citizen, as he was proud of having so noble and beautiful a city for his country.

Pope Eugenius IV. asked Cosmo de' Medici to send him an architect, for some building, with the name of which we are not acquainted. Cosmo sent Brunelleschi, with a letter, in which he said, "I send to your holiness a man of such abilities that he can move the world."

When the pope saw his small, slender, deformed person, he exclaimed, "Are you, then, the man who can move the world?" "Shew me," replied Brunelleschi, "where I can fix my lever, and this moment your highness shall see what I can do." It is not known what works he did at Rome: he, however, returned to Florence loaded with applause and honourable rewards.

Brunelleschi had a noble mind, an elevated talent, and an excellent heart. He was much esteemed in his own country, where he was elected a magistrate; but his worth was never so well understood as after his death. He was then universally regretted, and was buried with pompous ceremony in the church of Santa Maria del Fiore. Posterity has awarded him due honours. From his time is fixed the epoch of the restoration of good architecture.*

high, the top of which is 54 feet 4 inches from the pavement; the attic is 26 feet 7 inches high, and lighted by semicircular-headed windows; the length of the nave, including nine intercolumniations to the centre of the pier of the transept, is 186 feet 9 inches; thence, across the latter to a corresponding point, 42 feet 2 inches; and beyond, to the face of the wall at the end of the choir, in front of the niche, 63 feet 3 inches: the whole length of the transept between the walls, in front of the altars, is 168 feet 9 inches, and the width 84 feet 7 inches.

* *Vite de' piu Eccellenti Pittori, Scultori, e Architetti*, da M. Georgio Vasari, tom. iii.

Among his many pupils, the most distinguished was Luca Tancelli, a Florentine, who carried on for Brunelleschi the Pitti palace, and for Leon Battista Alberti, among other works, the large chapel of the Annunciation at Florence. He also executed many works at Mantua.

ANTONIO FILARETE,

THIS sculptor, with Simone, brother of the famous statuary Donatello, made, by order of pope Eugenius IV., the bronze gate of St. Peter's. It is to be regretted that this work was not entrusted to some of the able men who then flourished, and who made those beautiful models for the gates of the baptistery of San Giovanni at Florence, executed by Ghiberti so exquisitely, that Michael Angelo said they merited to stand at the gates of Paradise.

Filarete understood architecture very well, at least if we may judge from the plan of the hospital at Milan, which he built, in 1457, by order of the duke Francisco Sforza,—a handsome and commodious edifice. The dwelling for the men is in the form of a cross, 304 feet long on each side, and 30 feet wide. In the intervals are four covered court-yards, with rooms for the assistants. A canal, which flows at the side, serves for domestic purposes, as well as to turn a mill. That for the females is of the same form, with a cloister between, 152 feet wide and 204 feet long. In the centre of the cloister is a church, which serves for both hospitals. Filarete* also built the cathedral of Bergamo, which was considered to be in a good style; but the same opinion was entertained of his

* Vasari, tom. iii.

book on architecture, which he dedicated, in 1464, to Pietro de' Medici, and which little deserves that opinion, for the many ridiculous and absurd things which it contains.

MICHELOZZO MICHELOZZI, A FLORENTINE,

WAS instructed in sculpture and drawing by Donatello, and, afterwards devoting himself to architecture, became one of the most celebrated architects of his time. Cosmo de' Medici, the father of his country, who would not carry into execution the design of Brunelleschi for his palace, because too sumptuous, had that built by Michelozzo, which now belongs to the marquesses Riccardi, and by whom it has been exceedingly enlarged.

This was the first palace built after a good style in Florence, the apartments being handsome, and conveniently arranged, worthy of receiving those kings, emperors, and popes, who have passed through the city. There is one very visible error; the window of the first story does not fall plumb with the middle of the door underneath. The entablature is rich in stone-work, but too heavy and massive for the edifice.

Michelozzo was so sincerely attached to Cosmo de' Medici, that when the latter was banished from Florence, in 1433, he followed him spontaneously to Venice, where he made many designs for public and private buildings; and in the monastery of San Georgio, of the black Benedictine monks, he erected the famous library, at the expense of Cosmo, to whom this building alone could give pleasure during his exile. On their return to their native country, Michelozzo repaired the palace of the Signory, now called the Old palace, which had been built

by Arnolf, of a square form externally, so that the rooms were awry and disproportioned: the court-yard had columns of various sizes, and consequently the arches were some large and some small, and the staircases were inconvenient and dark. Michelozzo enlarged and improved it, but not sufficiently, as we shall see hereafter.

Michelozzo built, besides, the convent of the Dominican fathers, and the house for the novices of Santa Croce. By the commission of the duke Cosmo, he built the palace of Cafaggiuolo, in Mugello, like a fortress; the palace of the villa Carregi; and at Fiesole another palace, on an ingenious plan, on the acclivity of a hill, making the substructions into cellars, stables, and other offices, and forming the rooms above them. He also gave a design and model for an hospital for those pilgrims which Cosmo sent to Jerusalem, and for whom he provided.

Whilst Michelozzo was in Assisi constructing a fountain, and performing some repairs to the convent, by order of Cosmo, he made a design for the citadel at Perugia. On his return to Florence, he built the palace of the Tornabuoni, now belonging to the marquess Corsi. The duke of Milan, Francisco Sforza, having presented Cosmo with a palace at Milan, the latter, to shew his gratitude for such a gift, sent thither Michelozzo to enlarge and beautify it with every sort of ornament. By order of Peter of Medici, he also erected within the church of di' Servi at Florence the chapel of the Annunciation, rich in marble and gilding, supported by four Corinthian columns of marble, 17 feet high, with double flutes, and all the members of the base and capitals sculptured in various ways: but whether a good effect has been produced, is for those to judge who have seen it. Michelozzo died aged 68, and was buried at St. Mark's, in Florence.*

* Vasari, tom. iii.

GIULIANO DA MAJANO, A FLORENTINE,

(Born 1377, died 1447.)

HIS father was a stonecutter at Majano, a village near Fiesole. Giuliano was first a sculptor, and afterwards an architect. Being called to Naples by the king Alphonso, he there built the magnificent palace of Poggio, which is a perfect square. In the centre, on each side, is an arched portico, at the wings of which are Ionic pilasters, on a high pedestal : on each side are rooms. The second floor has Corinthian pilasters, between which are windows, with a pediment. The entablatures are without projections or interruption : within is a perfectly square court-yard, with galleries to the two stories. In the centre of this court-yard is a flight of steps, also square, by which you ascend to a paved floor, embellished with seats, tables, and jets d'eau. To the Castel Nuovo of Naples he erected a gate of marble in the Corinthian order, like a triumphal arch, enriched with large figures and bas-reliefs, which are still in good preservation, but in so narrow a situation, and so surrounded by houses, that it is impossible to view them. He also made many whimsical designs for fountains in the squares and houses of private persons. Being called to Rome by pope Paul II., he made a court-yard in the palace of the Vatican, which appears to be that now called San Damaso, surrounded on three sides by galleries of three orders. But his principal work was the palace and church of St. Mark, where he employed a great quantity of travertine stone taken from the ruins of the Colosseum. But the destruction of that superb amphitheatre is of very ancient date : tradition says, that to build the palaces of Rome, particularly the Tornese, the

Colosseum was dismantled. The same Paul sent Giuliano to Loretto to enlarge the body of that church. He returned to Naples, to terminate the edifices he had begun, but was prevented by the hand of death, in the 70th year of his age. The king Alphonso regretted him exceedingly; and ordered fifty men, clothed in mourning, to assist at his obsequies, and erected a marble tomb to his memory.

Polito, or Ippolito del Donzello, finished the building.

Giuliano had a brother, named Benedetto, a clever sculptor and carver in wood, and also an architect. He built the cupola at Loretto, and made the design and model for the Strozzi palace at Florence.

PIETRO AND IPPOLITO DEL DONZELLO

WERE two brothers, Neapolitan painters and architects, disciples of the above-named Giuliano, who finished the buildings begun by their master. They erected, besides, many edifices from their own designs; among them, the magnificent Caraccioli palace of the princes of Santa Buono, in the square of San Giovanni, at Carbonara.

ANDREA CICCIONE

(Died 1455)

WAS a Neapolitan, and, among the disciples of Masuccio the second, was an eminent architect and sculptor. He

built the famous monastery and church of Monte Oliveto; the beautiful palace of Bartolomeo of Capua, prince of Biccìa, and San Biago de' Librari. The third cloister of San Severino, in the Ionic order, and the small church of the Pontano, near the Pietra Santa, were afterwards executed from his designs.

LEON BATTISTA ALBERTI,

(Born 1398, died 1472,)

Of the noble Alberti family*, of Florence, was son of Lorenzo, and nephew of the cardinal Alberto, of the Alberti. A rare and almost universal knowledge of literature distinguished Leon Battista, who was canon of the cathedral at Florence. He was well versed in philosophy, mathematics, poetry, jurisprudence, and the fine arts. He could scarcely be less than a great man, as his noble relations were so attentive to his education, that every hour of the day was occupied by his various studies. He early and assiduously cultivated his noble talents, and never allowed a day to escape him without reading. He was familiar with painting and sculpture; and his knowledge in architecture was surprising, which he acquired by studying and measuring the ancient buildings, for which he undertook many journeys. His treatise *De Re Ædificatoriâ*, translated into the Italian by Bartoli, is an excellent work for architects, although somewhat overloaded with useless erudition. He merits to be considered as one of the principal restorers of ancient architecture, having happily re-established it both by theory and

* Vasari, tom. iii.

practice. He accompanied Nicolas V., who had a great love for building, and at whose wish Alberti repaired the conduit of the Acqua Virgine, and made the fountain of Trevi, which is now so modernised, that not a trace of the original design remains. For the same pope he made a design to cover the bridge of St. Angelo, which had not been the case since the time of Adriano, although a shelter from the heat of the sun was extremely desirable for the number of persons frequenting St. Peter's.

It is commonly asserted, that the principal façade of Santa Maria Novella, at Florence, which Ruccelai constructed at his own expense, was built by Alberti; it is in the Gothic or German manner: thus there is more foundation for attributing it to Giovanni Bettini. The gate, which is very beautiful, is, without doubt, by Alberti; as are also the marble Corinthian galleries and the Doric façade of the Ruccelai palace. In these galleries Leon Battista has observed a rule always attended to in antiquity, though afterwards as universally neglected; he did not place the arches on the capitals of the columns, because such arrangement would be false, but placed them on the architrave: this precept is now generally understood and followed.

At Florence, Leon Battista also erected the tribune della Nunziata, in the form of a round temple,—a work attended with some difficulty, and not destitute of either beauties or defects. The chapels are arched; and every one is aware that arches in a circular figure appear distorted,—an error into which many celebrated artists have fallen. In Mantua, for the duke Lodovico Gonzaga, he erected many buildings, among which is the church of St. Andrea; but the greatest part of the interior is spoiled, more particularly by the modern introduction of a cupola placed there, after a design by D. Filippo Giovara. What remains of the ancient work is imposing, well united, and generally evinces a good style of building, except that the pro-

jections of the cornices are small, the members too trifling, and the taste petite.

This is not the case in San Francesco, at Rimini, the most beautiful of all the buildings erected by this great man. It is easy to believe that the sight of the superb gate and arch at Rimini, on this occasion, furnished Leon Battista with his ideas. The plan which he made was for an addition to the old temple, which was not finished. Sigismondo Malatesta, prince of Rimini, — who had great talents and ingenuity, and so well versed in military knowledge, that to him is attributed the design of the castle at Rimini, now in great measure demolished, although by some given to Roberto Valturio, — commissioned Alberti to embellish the church of San Francesco. The interior still remains Gothic, with small chapels here and there, placed at some distance from each other. It is in part modernised by an order of pilasters, which, from the impost of the chapels, are carried up to the cornice that continues round the church; over these pilasters is an ornament of festoons. In the chapels, over the altars, are tabernacles, like those of the Pantheon, between two windows: the entrances to the chapels are rich in sculpture. The addition, entirely of marble, unites in front with the old part of the temple, but extends beyond the side walls. A basement is carried round, on which are placed in front four Composite marble columns, sustaining a projecting cornice, which is continued round the edifice. Between the columns spring three arches; that in the centre is the loftiest, but all have the impost of the same height; the lateral ones are enclosed with large marble slabs, and are carried down to the basement; the middle one touches the ground, and forms a square recess, in the centre of which is the gate of the temple, with its pediment; from the cornice of which hang large festoons and garlands of flowers in marble, which have a beautiful effect. The whole of the recess is ornamented with basso-relievos,

tablets, and rare marbles ; and in the spaces which remain between the arches and the columns are incrustated porphyry, enriched with garlands in basso-relievo. The flank of this church is a species of arcade. In the arches are placed the windows, which are as many in number as there are chapels. Here are the sepulchres of many illustrious men ; among them those of the Malatesta family, and of the beautiful Isota, celebrated for the number of her lovers. Here also is the portrait of Leon Battista. How this edifice was to be finished, it is impossible to decide, as there does not remain either model or design. From some medals it appears, that over the middle arch of the façade another was to have been formed, flanked with pilasters, to serve as a large window for the church. This was to have been crowned by a pediment, and each side was to have had pilasters, supporting two other half pediments, placed over the lateral arches below, as is seen in more than one of Palladio's façades. According to the medal, there was to have been a grand cupola ; but it is difficult to imagine how this could be in unison with the building. It is supposed that the plan was to be a Latin cross, terminated by a semicircular choir. The building is majestic, and vies with the antique in solidity ; the façade, with the large arches in the centre, has a triumphal appearance, very characteristic of a temple intended as a monument of the victories of Sigismondo, who had promised it in a vow to the Almighty. It is said that Alberti was commissioned by Nicolas V. to rebuild the Basilica Vaticana, and, as a proof that he possessed sufficient ability, he began the construction of a vast tribune at the head of the old basilica, and for this purpose demolished the ancient temple of Probus, which was in that situation. But it had scarcely been commenced, when the pope died, and no further advances were made in the undertaking.

Alberti always lived like a true nobleman, that is, liberal

and courteous to all, and the friend of virtue. He composed a number of works, on various subjects. He died in his own country, at a very advanced age; but the precise time is not known.

The taste of Alberti in the decoration of his orders is not the most exquisite, and gives evidence of the obscure times from whence he emerged. His Doric capital is almost Gothic, and his Corinthian is ill constructed, and only nine diameters in height; but the most remarkable thing is, that in this order the corona is omitted.

CRISTOBOLO

WAS employed by Mahomet II. to build a mosque at Constantinople, on the ruins of the church of the Holy Apostles, originally erected at the expense of Theodore, wife of Justinian; and produced an edifice which in magnificence nearly equalled St. Sophia; and afterwards eight schools and eight hospitals, dependent on this mosque. The sultan, as a reward, gave him the street which remains in the family of Cristobolo, and is inhabited by the Christians. It is difficult to believe that an architect should have the whole of a street awarded him for his talents; but it is well to know that the Turks do not always treat the Christians so barbarously as is represented. No Christian nation will suffer a mosque near them, yet the Turks admit of our churches and missionaries.

BERNARDO ROSILINI, A FLORENTINE,

WAS highly esteemed by pope Nicolas V., who employed him to make a square, and the church of St. Francesco at Fabriano; at Gualdo, the church of Benedetto; and in Assisi that of Francesco. This pope also employed him on many other edifices and fortifications, at Civita Vecchia, at Narni, at Corvietto, and at Spoleti, and to restore the bath at Viterbo, which had been in a ruinous state for some time. Afterwards, by commission of the same pontiff, Rosilini repaired a great part of the walls of Rome, furnished them with towers, and added much to the strength of the castle of St. Angelo. A great number of churches, and, above all, the basilica of Giovanni Laterano, of Paolo, of Lorenzo without the walls, &c. were restored and embellished by him. But his greatest work would have been in the suburbs, had the designs which he made, at the suggestions of Nicolas V., been carried into effect; a new temple of St. Peter's, which, in grandeur, magnificence, and richness, was to surpass any other building: three spacious streets were to lead to the temple, all under porticoes, with galleries above for the artificers, who were to be distributed and distinguished according to their classes. Finally, a palace sufficiently spacious for the pope, with all his court, the cardinals and their attendants, with other officers belonging to the church; superb apartments for the accommodation of the monarchs, emperors, and sovereigns, and their numerous retinues, who might visit Rome; villas, gardens, fountains; a grand theatre for coronations and other luxuries, were not forgotten to embellish this palace. But the pope died, and all these magnificent plans vanished like a dream.

BACCIO PINTELLI, A FLORENTINE,

BUILT at Rome, by order of pope Sixtus IV., the church and convent of Santa Maria del Popolo, and a palace in the old suburb for the cardinal Rovere,—an edifice then much esteemed. The Sistine chapel to the Vatican; the hospital of Santo Spirito, in Sassia; Ponte Sisto; the church of St. Pietro, in Vincola; and that of St. Sisto,—are all of his building. He also rebuilt at Assisi the church and convent of San Francesco.

BARTOLOMEO BRAMANTINO, A MILANESE,

FLOWERED about the middle of the fifteenth century, and rendered himself equally celebrated both in painting and architecture. After having painted many subjects in Rome, by order of Nicolas V., he measured the antiquities of Lombardy, and composed a book on them.

He erected many buildings in Milan; among them the church of St. Satiro was much esteemed, richly ornamented within and without with columns and double corridors, with a sacristy full of statues, and a magnificent tribune. It is insisted by some, that Bramantino was one of the first to revive good architecture, and that from him Bramante learnt much,—not Bramante Lazzari of Urbino, but another of the name, at Milan, who at that time was considered a good architect.

GIOVANNI DEL POZZO,

A canon of the cathedral at Cuenca, the founder of the Dominican convent of St. Paul, near that city, about the middle of this century, and the architect of the celebrated bridge at the entrance of the convent. It is over the river Huexar, and so admirably constructed, that it appears a Roman work. It has five arches, the middle piers of which are 150 feet high, and look like towers; the bridge is 350 feet long. It is said to have cost 63,000 ducats,—a great sum at that period.

The bridge passes before the above-named convent. Don Antonio Ponz, who visited Spain, says, that he is surprised the canon Pozzo does not rise from his sepulchre and destroy the massive entrance, which may be termed one of the most ridiculous of modern works. The church is rich Gothic, and the work well executed. In the centre of the transept is the body of the founder, with his statue in a sitting posture, and an inscription, simply giving his name.

Pietro del Pozzo, a relation of this excellent man, built the convent of the Jesuits of Cuenca, now of the Interpreters, on a good plan; but the interior is spoilt by an excess of capricious ornament.

FRANCESCO DI GIORGIO, OF SIENNA,

(Born 1423, died 1470,)

OF the Martini family at Sienna, a clever sculptor and a delightful painter,—an intelligent engineer and judicious

architect. At Urbino, for the duke Frederigo Feltre, he built a famous palace, arranged with great judgment, both as to convenience and beauty. The staircases were more beautiful and convenient than any that had been constructed till that period. Bianchini, who gives a most tedious description of them, insists that the principal architect was one Luciano, born in Lauriano, a place in Slavonia, and sent by the king of Naples to Frederigo, duke of Urbino. Others attribute this edifice to Baccio Pintelli, and others again to Leon Battista Alberti. However, let who will have been the architect, it is a work of great solidity, and entirely of brick. The façade is extensive, but not elegant, and symmetry is not attended to in the large doors and windows. The principal courtyard is a rectangle, surrounded by a portico of columns, of travertine stone, each in one piece, of the Composite order, with an attic base. Over the capitals are round arches, which sustain an entablature; over this rises a second order of Corinthian pilasters, between which are windows, well arranged, and corresponding with the arches below. The edifice is terminated by a large entablature: in the thickness of the wall are two stories of apartments. The staircase is commodious and spacious; the principal hall, 110 feet long, 43 wide, and 50 high, covered with a skylight. All the rooms are in proportion, and arched. Francesco Giorgio made, besides, the designs and models which pope Pius II. required for the palace and bishopric of Corsignano, his country, by him declared a city, and, from his name, afterwards denominated Pienza. It is considered that legitimate architecture is much indebted to this architect.

FRANCESCO COLONNA

(Nisi utile est quod agimus stulta est gloria.)

NEITHER merits the title of an architect or a writer on the subject of architecture. It is true that he composed a large book, which (although compared by his commentator to that of Vitruvius) is too full of absurdities to be read with patience. As well might the term "architectural" be applied to the writings of Ariosto, Tasso, or any other work of fancy.

ARISTOTILE ALBERTI, A BOLOGNESE,

Is called in the Catalogue of Painters Ridolfo Fioraventi. In mechanics he was one of those rare geniuses who appear like prodigies in the course of many centuries, and astonish not only the vulgar but the most scientific. He is ranked with Detriano, Zabaglia, and Feracina.

In Bologna he removed the bell-tower, with all the bells, of Santa Maria del Tempio, called by the Bolognese La Maglione, to a place 35 feet distance. At Cento, in the church of Biagio, he set the bell-tower upright, which inclined 5 feet and a half. In Hungary he rebuilt the bridge over the Danube, and performed so many other wonders, that the king knighted him, and allowed him to coin money and stamp it with his own name. The great duke of Moscovy, John Basilide, on the fame of such astonishing efforts, sent for this great man, and commissioned him to build a number of churches.

CHAPTER II.

OF THE ARCHITECTS OF THE SIXTEENTH
CENTURY.

THE century we have just passed abounded in architects, that which we are about to describe still more so.

The Tuscans have great quickness of wit, activity, and perseverance; they have been particular in preserving memorials of whatever related to their history, though sometimes disposed to exaggeration. Florence has been considered in arts and science the Athens of the three last centuries; and Tuscany has been compared to a diamond, not of the first weight, but of the finest water. The grand dukes of the Medici family were each a Mæcenas; and it is well known that such characters create men of ability. It is equally true, that learned men seldom want a Mæcenas. These two descriptions of persons reciprocally produce each other. The common complaint is, that now we have no talent, as we have no longer the Cosmos and Leos; but this is the language of idleness and ignorance. Let any one prove that he possesses ability, and he will meet with a patron: but even supposing he should be oppressed with penury, as may sometimes happen, he will find some satisfaction in the consciousness of his own merit, and will be plenteously recompensed in the glory which the public will one day award him. It must be confessed, to the honour of letters and the fine arts, that rewards are not necessary to produce talent. The respect and esteem which they excite, has been the cause, especially in England, of the rise of so many illustrious characters. The progress of the mind is not retarded by

suppressing reward, but by bestowing it improperly; and an ignorant patron may do more harm than good. When Sixtus V. applauded Roselli for covering his pictures with ultramarine and gold, Perregino and other great painters were obliged to spoil their productions to please the fancy of this pope, who was destitute of any taste.

BRAMANTE D'URBINO.

(Born 1444, died 1514.)

BRAMANTE LAZZARI* was born in Castel Durante, or, according to some, at Fermignano, of a poor but honest family. He was from a child instructed in drawing and painting; but feeling a great inclination for architecture he travelled into Lombardy, and after having studied the cathedral of Milan, went to Rome, where he painted a number of subjects, which no longer exist, in the church of San Giovanni Laterano. All his attention was directed to the study, examination, and measurement, of the valuable remains of antiquity within and without the walls of Rome. He measured all that remains of the Villa Adriana at Tivoli, and afterwards went to Naples for the purpose of completing his studies. The cardinal Oliviero Caraffa, discovering his talent for architecture, ordered him to rebuild, for the fathers della Pace, at Rome, the cloister, which was of travertine, and executed by Bramante with extreme care: and although it had not any particular beauty in its design, it procured great credit to its author, Rome not then boasting of a superior architect.

* Vasari, tom. v. p. 137.

He served pope Alexander VI. in the quality of superintendant in the erection of the fountain of Trastevere, and that part of the piazza of St. Peter which was taken down some years ago. His reputation increasing, he erected a great part of the Palace della Cancellaria, and the church of St. Lorenzo and Damaso. He made the design for the palace in the piazza of San Giacomo Scosciacavalli, which now belongs to the counts Giraud. The gate has only been finished a few years; it is not after the grave and solid style of Bramante. All the aforesaid edifices are of travertine stone, but in a regular style, which shews that architecture was then improving, though not entirely purified from barbarism. It is thought that the palace of the duke di Sora was designed by him; if true, it is not much to his honour.

Bramante was much esteemed, of a quick intellect, and unequalled both in invention and execution. But we should not have known of his abilities without a Julius II., who was as capable of suggesting great things as Bramante of executing them. This pontiff was desirous of reducing to the form of a rectangular theatre the space between Belvedere and the old Vatican palace.

At the extremity of this court, which was 400 paces long, and between two small palaces of equal size, he placed a niche of such majestic proportions, that it appeared of consequence when seen from the opposite end; but half the court was not on a level with the rest: he levelled it, so as to render the access to the niche and palaces more commodious. Thus two-thirds of the court remained in the lower plain, and the rest a little above, forming a species of terrace, the ascent to which was by a double flight of winding steps, admirably constructed, with a beautiful niche, and fountains between the flights, and the walls adorned, in the manner of a theatre, with twenty columns of the Doric order. This diversity of arrangement, and the irregularity of the ground, con-

tributed to the beauty of the effect, by breaking the immense length of the court, which far exceeded its breadth. The porticoes round it were formed by pilasters of the Doric order, in imitation of the theatre of Marcellus, the only perfect monument of antiquity of this order remaining at Rome. Above is a second order, Ionic, with windows. At that part of the court which is contiguous to the Vatican palace, under the Borgian apartments, Bramante made a grand semicircular staircase, in the form of an amphitheatre, where a number of persons might stand to view the spectacles which were exhibited below.

Sixtus V., wishing afterwards to remove the library which Sixtus IV. had placed on the ground floor, built, across the before-mentioned court, and a few yards from the staircase, a large vaulted chamber, which is now the celebrated and incommodious Vatican library.

This destroyed what Bramante had contrived with so much ingenuity. Subsequent changes and alterations have reduced the court, originally the most magnificent in the world, to two smaller ones, and a garden totally unconnected with them, and shutting out the great niche, which is now only seen from the garden, where it appears disproportionate, from being too close to the eye. The engraving of the court, as left by Bramante, executed but indifferently by Enrico Van Schoel, is among the rich collection of prints in the library erected by the Corsini princes, and with true liberality maintained for the public benefit.

The celerity with which pope Julius II. wished his projects to be executed, was seconded by the activity of Bramante, who worked day and night at the Vatican. But this excessive haste caused all the walls to give way, and in some cases to be entirely rebuilt. During the pontificate of Benedict XIII. it was necessary to strengthen the pilasters of the court, when they were so enlarged that they now look disproportionate: the same thing

was done in several other places under Benedict XIV. The steps of the Amphitheatre afterwards becoming dangerous, they were entirely removed, and the ground levelled.

In the Belvedere, Bramante afterwards made some whimsical staircases, composed of the three principal orders of architecture. Julius II. rewarded this favourite architect with the office "*del piombo*," when Bramante made a very ingenious machine for stamping the bulls. He attended the pope to Bologna in 1504, when that city was incorporated with the pontifical states, and served as an engineer in the wars of Mirandola.

By command of the same pontiff, he made the Strada Giulia, for the purpose of placing there all the offices and halls of justice in Rome, and commenced a palace on the Tiber, near San Biagio, in rustic-work, which never was finished; there are now scarcely any remains of it.

The graceful and beautifully proportioned temple within the cloister of San Pietro Monterio, is one of the most esteemed works of this architect. It has, nevertheless, many defects: the door cuts two pilasters; the balustrade, which forms the upper gallery, is not strengthened by pedestals or acroteria, that at the base is equally slender with that at the top, which certainly should not be the case; the attic is too high; and, finally, the ornament at the summit of the dome is exceedingly heavy. Notwithstanding the narrowness of the space, two flights of steps, judiciously contrived, conduct to the subterraneous chapel.

According to the original design, this temple was to have been in an ample enclosure, surrounded by porticoes of isolated columns, and four entrances to four small chapels at the angles, and a niche between each chapel and entrance: a simple and picturesque idea.

Bramante also built the palace, which afterwards belonged to Raffaello d'Urbino, of brick, with columns cast in one piece, (an invention then new,) with bosses of rustic

work under the Doric order. This palace was beyond the Traspontina, and was taken down to build the colonnade of St. Peter's.

Whilst Francesco Maria della Rovere, duke d'Urbino, had the command of the Venetian armies, his consort, the duchess Eleonora Gongaza, commissioned Bramante to build a new imperial palace, on the side of a delightful hill, near the old one. Bramante made very strong foundations to support the arches on the declivity, which he ornamented with coffers, like those of the Pantheon and the Temple of Peace. Above these arches he raised a court, level with the state apartment, ornamented within by pilasters of a good-proportioned Doric. By three arches of the portico, formed of stone columns, you pass to a rectangular hall, terminated at the two extremities by semicircular tribunes, in which are the doors of two apartments. The above-mentioned doors are curious, the jambs in the width of the opening are disposed obliquely, so that those who are without cannot see those within. The ceilings of the rooms are in beautiful compartments, and the superior ones are ornamented with elegant stuccoes, now spoiled by the water falling from the open galleries which were round the palace, and subsequently covered by Clement IX. The hanging gardens were extremely magnificent; and the whole would have been worthy of Bramante, but it was not finished, in consequence of the death of Eleonora and the duke.

The designs of Bramante for palaces and churches, both in Rome and the states, were numerous, but his greatest work was the basilica of St. Peter. Julius II. conceived the grand idea of demolishing the old church and erecting a new one, whose equal should not be found in Rome or the world. Bramante made a number of designs; among them, one with two bell-towers and a façade in the centre, as is seen in the medals struck in honour of him, under Julius II. and Leo X., by the ingenious Corodasso. Bra-

Bramante had the glory of triumphing over all his competitors; and justly. The plan, although a Latin cross, was well divided, and of a vastness unequalled. The principal nave was well proportioned, with peristyles forming three naves. He so admired the Pantheon, that he conceived the idea of introducing it in his new building, and gave the same dimensions to his cupola and steps, as those of the above beautiful example. The general arrangement was also similar, being composed of eight masses, between each of which were two columns, forming three intercolumniations. He selected this design with his accustomed haste, demolished half the church, and in 1513 began the new one, which, before the death of the pope and the architect, was raised nearly to the cornice, with an expedition almost incredible. The arches were turned to the four great piers, and the principal chapel was erected opposite the entrance. On this occasion Bramante covered the arches with wood, which were sculptured like the frieze, and wreathed with a mixture of cement. Thus he renewed the use of stuccoes, as practised by the ancients, but the knowledge of which had been lost for some time. Without the walls of Todi he erected an isolated temple, internally incrustated with white stone, worked in the form of a Greek cross, and a beautiful cupola in the centre: it is said to be a model of St. Peter's. This latter structure, designed with so much anxiety, and began with such ardour, remained unfinished. The architects who succeeded him, as we shall see hereafter, made so many changes, that, except the four great arches over the tribune, nothing of his work remains. He died aged seventy, and was most pompously interred at St. Peter's, his remains being followed by all the papal court and professors of the fine arts.

Bramante was of a lively disposition, easy manners, and liberal, particularly towards men of talent, for whom he always entertained an affectionate regard. It was he who

conducted to Rome and encouraged the incomparable Raphael, and also taught him architecture.

In the school of Athens, Raffaello drew the portrait of his worthy master leaning against a pilaster, and appearing to describe with the compasses a geometrical figure, surrounded by youths, who are regarding him with great attention. Bramante always lived in a respectable and honourable manner. He delighted in poetry, and composed some sonnets, which, if not very superior, are at least agreeable, and without defects, as may be seen in the collection of *Opuscoli*, printed at Milan in 1756. He sometimes performed the part of an improvisatore, which he did with less difficulty than appears possible, and which Cicero calls *audax negotium et impudens*. For so many amiable qualities, both of the heart and mind, Bramante was esteemed while living, and his memory venerated when dead. His manner in architecture was at first cold and formal, but afterwards became elegant and majestic. He possessed genius and was fertile in invention, and gave to his buildings requisite solidity.

Michael Angelo much esteemed him, which he evinces in a familiar letter to his friend Messer Bartomeo :—
“ It cannot be denied that Bramante is superior in architecture to all others, since the time of the ancients,” &c.

Venturi Vitoni of Pistoya was his disciple: he built, in his own country, the church dell' Umilità. It is an octagon, with a portico of the Corinthian order; the cupola was added by Vasari.

GIULIANO DI SANGALLO, A FLORENTINE,

(Born 1443, died 1517,)

WAS son of Francisco Giamberti, a respectable architect. Giuliano* and his brother Antonio were at first engravers and engineers, they afterwards devoted themselves to architecture. Giuliano began the cloister at Florence, which now belongs to an order of Carmelite monks, called Santa Maddellena de' Pazzi, of the Ionic order, copied from an ancient capital found near Florence: the volutes of this capital descend to the necking of the columns; and under the ovolo is a frieze a third of the diameter high. For Lorenzo de' Medici, surnamed the Magnificent, he built a palace at Poggio a Cajano, and made the vault of the great hall† of such a size, that it was considered a masterpiece, and was the largest then known.

He rebuilt the fortification of Ostia, the bishop of which was afterwards Julius II., and where Giuliano remained two years; the inhabitants are obliged to quit the neighbourhood, except during the winter months, on account of the malaria. It is the want of inhabitants which causes this malaria so to predominate in the neighbourhood of Rome, where superfluous water often remains stagnant, from the lands being uncultivated. He afterwards went to

* Vasari, tom. v. p. 207.

† This hall is 163 feet in length, 68 wide, and 65 high. It is built with a fine stone, decorated with columns and pilasters, of the Corinthian order, with niches, statues, and bas-reliefs. The statues, which decorate the walls, are from the hands of the most celebrated masters. The ceiling is flat, and divided into thirty-nine compartments, very richly ornamented; each contains a subject painted in oil by Vasari. The walls are decorated with fresco subjects of the triumphs of the Medici.

Naples to present a model to the king for some work near Castel Nuovo; with which the monarch was so much pleased, that he made Giuliano a rich present of horses, clothes, and other valuables; among them a silver cup, containing a hundred ducats. Giuliano, who was of a noble disposition, refused to accept them, excusing himself by saying, that he was in the service of Lorenzo de' Medici, who did not value riches. The king, surprised at his independence, insisted on his selecting whatever might please him, Giuliano then chose some fragments of antiquity,—a head of the emperor Hadrian, a naked female figure, and a sleeping Cupid,—which, on his return, he presented to Lorenzo de' Medici, who was well pleased with this testimony of the architect's disinterestedness, that he commissioned him to build, without the gate of San Gallo, at Florence, a large convent for the hermits of St. Agostino. He also executed many other works in that city, among which was the grand palace, called Poggio Imperiale. He was afterwards called to Milan, to build a superb palace for the duke, which he began; but the war breaking out prevented its completion.

He built the cupola of the church of the Madonna di Loretto in Rome, under Alexander VI.; he restored the soffite of Santa Maria Maggiore, said to have been gilt with the first gold brought from America; and adorned the national church dell' Anima, which was in the Gothic style, with a square façade of three orders of pilasters; for the cardinal Rovere he built the palace adjoining St. Pietro in Vincola, on the north side of the church; it is not very worthy of attention.

At Savona, the birth-place of the above cardinal, he made a design for another palace, considered extremely superb: but in consequence of the vicissitudes of that time, he sought refuge at Lyons, and presented a model of what he had designed to the king of France, who was

much pleased with it. The edifice was not completed till some time afterwards: it is now converted into the monastery of Santa Chiara. He also designed, for the duke Valentino, the castle of Montefiascane, of which there only remain some fragments of walls.

When Julius II. assumed the papacy, Giuliano was indignant at the pontiff, in whose service he had been so much employed, entrusting the rebuilding of St. Peter's to Bramante D'Urbino; he in consequence retired to Florence. He was afterwards recalled by the pope, returned to Rome, and followed him to the war; but not being employed in any considerable buildings, he again became disgusted, and withdrew himself. Pietro Soderini Gonfaloniere, of Florence, employed him, at the siege of Pisa, to build a very ingenious bridge, so constructed, that it protected the besieged from the fire of the enemy. He also planned the fortress of Pisa, and the gate of San Marco, of the Doric order. He went once more to Rome, by desire of Leo X., to superintend the building of St. Peter's, but his age and infirmities obliged him to relinquish the office, and he retired to his native country, where he was desirous of spending his last moments.*

* In addition to the buildings designed by this architect may be mentioned the palace Gondi, in the place called Santo Firenzo; it was commenced in 1490 for a rich merchant. The beautiful proportion of the façade, the elegance of its architecture, gives us a high idea of the qualifications of him who executed it. The interior court is well disposed, and has been highly ornamented; it is surrounded by a portico, and in the middle is a fountain. The staircase has a very rich balustrade, and the walls over the arches have some antique medallions. — See *Architecture Toscani, par A. Grandjean et A. Famin.*

ANTONIO DI SANGALLO,

(Died 1534,)

By order of Alexander VI. altered the tomb of Hadrian into its present form, when it took the name of the Castle of Sant' Angelo. He then constructed the castle at Civita Castellana, designed a fortress at Arezzo, and was appointed by the government of Florence superintendant of all the fortifications. At Monte Pulciano he erected a beautiful temple to the Madonna, and other churches at Monte Sansovino: but the infirmities of age not enabling him to endure the inconveniences to which his profession subjected him, he devoted himself entirely to agriculture.

These two brothers improved the Doric order: they were great lovers of antiquity, and had a fine collection of antiques. Architecture was almost hereditary in their family, as we shall see hereafter.

LEONARDO DA VINCI,

(Born 1443, died 1518,)

WAS born in the castle di Vinci,* near Florence, and united such a combination of talent as is seldom seen in one person. The beauty of his appearance, the agility of his

* Vasari, tom. v. p. 21.

body, his strength, so wonderful, that with one hand he broke a horse's chain,—were gifts of an ordinary kind, when compared with those of his mind. He gave many extraordinary proofs of his abilities as a painter, sculptor, anatomist, architect, geometrician, mechanic, poet, and musician; but was particularly distinguished in painting. He was the first who produced a style after nature, subjected the art to certain rules, and recovered it from that languor into which it had fallen during the barbarism of the preceding centuries. By order of Lodovico Sforza, duke of Milan, called the Moor, he conducted the waters of the Adda to Milan, and rendered the canal of Mortesana, near the valleys of Chiavenna and Valtellina, navigable over a space of 200 miles, surmounting innumerable difficulties, and making new drains to preserve the lands from frequent inundations. This is the only instance on record in which he acted as an architect: after completing it, he composed a treatise on the nature, weight, and motion of water, and made a great number of new machines. It was his custom to write on whatever he executed; which he is said to have done with his left hand, as all his works preserved in the Bibliotheca Ambrosiana, at Milan, are written from right to left, in the Hebrew manner, and are not legible without a magnifying glass. When Louis XII., king of France, was at Milan, he made a figure resembling a lion, which moved by internal machinery towards the king in the great hall of the palace; it then stopped on a sudden, and, with its claws opening its chest, shewed the arms of France on its heart.

After remaining some years at Milan, Leonardo returned to Florence, where he was, with Michael Angelo, selected to paint the saloon of the council. A noble emulation induced them to execute those famous cartoons, which are the admiration of all Italy, and, while they exist, will serve as studies to painters. He afterwards went to Rome, but the disgraceful jealousy which arose

between him and Michael Angelo, made him resolve to visit France, whither he was invited by Francis I. Leonardo having fallen ill at Fontainebleau, the king set out to see him. Overcome with this attention of majesty, he collected all his strength to raise himself; but at this moment he was taken with a mortal fainting, the king hastened to assist him, and he died in his arms.

Both in theory and practice, Leonardo may be considered as the father of painting. He has left a multiplicity of clever and interesting observations in his works, superior to whatever has been written since. He made the great perfection of his pictures to consist in representing objects as if he saw them in a glass or camera obscura.

SIMONE POLLAJUOLO, A FLORENTINE, CALLED
IL CRONACA,

(Born 1454, died 1509.)

HE visited Rome at an early age;* and, being attached to architecture, devoted his time to measuring those noble remains, of which there were then a great number, and in excellent preservation: there are now but few, and those few, by time and a variety of accidents, are spoiled and disfigured..

Simone returned to his country, and from continually speaking on the ancient monuments of Rome, received his surname. Being reputed an excellent architect, he was employed by Strozzi to continue the building of his palace, which had been designed by Benedetto da Majano, who had left Florence at the time Il Cronaca arrived there.

* Vasari, tom. vi. p. 19.

He erected the façade in the Tuscan order, very beautiful, and at the top placed a Corinthian entablature, the most magnificent that has ever been seen. Il Cronaca designed it from an entablature at Spoglia di Christo at Rome, and increased its proportion for the purpose for which he employed it. In applications of this kind great judgment is requisite : Bramante, Michael Angelo, and Palladio's best works united, would produce absurdity ; as from many fine verses repeated indiscriminately from Homer, Virgil, Tasso, and Milton, might result something perfectly ridiculous. Il Cronaca afterwards adorned the court of this palace with a Composite order below and a Corinthian above, with columns, windows, and doors, extremely beautiful. The interior, however, did not correspond with the exterior ; not from the fault of Cronaca, who was obliged to accommodate himself to the taste begun by others. Benedetto da Majano is also excusable, being confined for want of space, the persons residing near not choosing to relinquish their houses.

Il Cronaca built the sacristy of Santo Spirito at Florence, of an octangular figure ; it is elegant and well proportioned. On the hill of San Miniato, without Florence, he built the church of St. Francesco, of such exquisite proportions, that Michael Angelo used to call it his beautiful *villanella*. He also erected the convent of the serving fathers,—an edifice much praised in its time, but of which little now remains by this architect, from its having been often increased and repaired.

He had also a great share in rebuilding the council-hall at Florence, one of the largest halls in Italy ; surpassing even those of the Vatican, of the Vicaria at Naples, of the ducal palaces at Milan, of Urbino, Padua, and Venice. After this work, which was very defective, being square without, and extremely dark, Il Cronaca was so infatuated as to join the party of the brother, Savonarola. He died in his own country, and was buried at Sant' Ambrogio.

ANDREA CONTUCCIO DA MONTE SANSOVINO,

(Born 1460, died 1529,)

WAS the son of a peasant* named Dominicho, and the same circumstance occurred to him as to Giotto. Whilst attending his flocks, when a child, he was discovered drawing on and modelling the clay. Simone Vespucci, then governor of that province, saw the inclination and talent of the youth, and, with the permission of his father, took him to Florence, for the purpose of educating him. Andrea became one of the first sculptors, as we may see by his statues, of which there are a great number at Florence, at Genoa, and other cities, and especially at Rome, in the two famous sepulchres, in the choir della Madonna, del Popolo, and in the group of Sant' Anna, Christ, and the Madonna in the church of Santo Agostino.

He was equally successful in architecture; his chapel del Sacramento, in the church of Santo Spirito at Florence, is an instance of it: although small, it is so beautifully constructed, that it appears cut out of one piece. The asylum of the sacristy of the same church is an edifice entirely of stone, with twelve Corinthian columns, supporting an architrave, frieze, and cornice, and a vault of stone, divided into compartments, well sculptured, which are not placed immediately over the centre of the columns. When Contuccio was reprehended for this fault, he replied that he had imitated the Pantheon: from such legitimate examples arise sometimes absurdities. The fame of this artist was so great, that the king of Portugal requested Lorenzo de' Medici to spare him. He built many edi-

* Vasari, tom. ix. p. 291.

fices in that country ; among others, a royal palace, with four towers. After having resided nine years in Portugal, he returned to Italy loaded with rich gifts, and was by pope Leo X. sent to Loretto, where he executed many beautiful sculptures, finished the palace of the canons began by Bramante, and fortified the city. Whilst employed at Loretto, in the four months of absence allowed him every year, he went to Monte Sansovino, his native place, where he built for himself a convenient house, and purchased some property. He passed the remainder of his life in tranquillity among his relations and friends. He ornamented the place of his nativity with a cloister for the monks of Santo Agostino, and a small chapel without the gate. He overheated himself in removing some palings in front of his villa, and died in consequence. He was prudent, just, and reasonable, provident, courteous in his manners, and a friend of learned men. He left some of his designs and writings on the proportions and measurements used by the ancients.

RAFFAELLO D'URBINO,

(Born 1483, died 1520,)

HAD for his father Giovanni Sanzio, a painter, of not much celebrity, but possessing talents in one of the most important affairs—the education of his children. His ancestors were painters ; and, were we here considering Raphael as a painter, we should say that in him Apelles lived again, and that we have since never had his equal ; but we are going to treat of him merely as an architect.

Raphael* was taken to Florence by Leo X. to build the façade of San Lorenzo. His design consisted of two orders, above which is an attic. The palace of the Ugocioni, now Pandolfini,† is of his architecture. This palace has two stories, the quoins of the building are rusticated, and the windows of each floor are decorated with columns, supporting entablatures, with triangular and circular pediments alternately. In Rome he erected the stables of Agostino Chigi, in the strada Lungara, near the Farnese palace. The first story has small double pilasters, with their pedestals distinct; they are of the Doric order, with an architrave of three faces, a plain frieze, and a cornice entire: the second floor has the same number of Corinthian pilasters, with their pedestals also divided. In consequence of so many breaks, the effect is destroyed, and the cornice on the first story appears to have no connexion with the rest: the door, having Doric columns and high pedestals, is also in bad taste. Near to Sant' Andrea della Valle he built the palace Caffarelli, now Stoppani; the façade has a rustic basement, which is beautiful. Over this is an order of double Doric columns, between which are the windows, each with its balustrade of stone. This order looks heavy, nor is the disposition of the columns happy, which, besides the inconvenience of being coupled, prevents the eye extending

* Vasari, tom. iii. p. 54.

† This palace is admirably disposed for its situation, which is at the angle of two streets, called San Gallo and Santa Salvestrina. The piece of ground on which it stands is very irregular in its shape, and presented some difficulties. The court and garden are decorated with fountains and antique statues. The façade is built of stone, with the exception of the principal cornice, which is of wood; the latter is very beautiful, and it is to be regretted that it is executed in so perishable a material. This work may be considered, perhaps, one of the best of this artist's designs in architecture.

from one window to the other. But Raphael was particularly fond of thus coupling the columns.

After the death of Bramante, Raphael was one of the architects of St. Peter's, for which he made a design. He divided a Latin cross into three naves, with a recessed chapel on each side. The lesser branches of the cross terminated in a semicircle, with a number of isolated columns and pilasters. These latter predominated every where. The cupola was at the intersections of the transept, and somewhat too distant from the façade, which had a triple portico of isolated columns, with unequal intercolumniations, and the portico was surrounded on three sides by a simple flight of steps: the idea wanted grandeur. He also designed the gardens of the Vatican palace. It is said that, for a considerable sum which Leo X. owed him, Raphael hoped to have been made a cardinal, and that in consequence of this hope he deferred his nuptials with the niece of the cardinal Bibiena. He died at the age of thirty-six, from inattention to the state of his health, on Good Friday, the anniversary of his nativity. It is impossible to imagine what he would have been as a painter, had he not died at so early an age. *Quantum ad gloriam longissimum ævum peregit.* After the most pompous obsequies, he was buried in the rotunda, where is his bust in marble, with a Latin inscription, and the famous distich of the cardinal Bembo :—

Hic est ille Raphael : timuit
quo sospite vinci
Rerum magna parens et mo-
riente mori.

Which may be thus translated :—

“ To the memory of Raphael. Nature feared to be conquered by him while living, and to be annihilated at his death.”

Softness, grace, and elegance, the characteristics of his pictures, were conspicuous in his own person. Courteous to all, and so liberal, that when he went to the pope, he was followed by more than fifty painters, who courted him as their monarch.

He endeavoured to imitate Michael Angelo; but not being able to equal him in naked figures, he soared into the boundless regions of painting; that is, he knew how to manage with precision and elegance all the beauties of the art, which are by authors entitled invention, composition, design, colouring, and expression. He treated these in a manner which would have been admired by all Greece. His skull is preserved in the academy of St. Luke, which the students visit, as if in the hope of being inspired with similar talents; and it is wonderful that, admiring him so much, the modern painters should so little resemble him. Either they do not really wish to imitate him, or do not know how to do so. Those who duly appreciate his merits have attempted it, and been successful. Mengs is an example of this observation.

BACCIO D'AGNOLO, A FLORENTINE,

(Born 1460, died 1543,)

WAS an excellent carver in wood; but being much attached to architecture, he went to Rome, to study it among the monuments of antiquity.* He, however, continued his business; and assembled at his house, particularly in the winter, the most able artists of that time, — Raphael, then a young man, Il Sansovino, Majano, Il Cronaca, Giulio,

* Vasari, tom. vii. p. 103.

Antonio Sangallo, and sometimes Michael Angelo, with other ingenious Florentines and strangers. Baccio erected a part of the great hall at Florence. At Gualfondo he designed a garden, now belonging to the marquess of Riccardi. In the piazza of the Santa Trinita he built a palace for Giovanni Bartolini,* and introduced a cornice, copied from one at Rome in the gardens of the constable Colonna, but which, with many other antiquities, is now destroyed. Baccio had not the judgment of Cronaca: he applied to this small palace so large a cornice, that it appeared like an immense hat on the head of a child. This was the first palace with windows ornamented by pediments, and columns to the doors, bearing an architrave, frieze, and cornice; a novelty which, like all others, was first blamed, and then passionately admired. All Florence ridiculed Baccio for this new style; not only personally, but with sonnets and epigrams reproaching him with building a chapel instead of a palace. Those who ridiculed the building did not understand the subject, nor the reason for placing pediments over the windows: perhaps Baccio could not sufficiently account for them himself. He built several other palaces, and gave the designs of the Villa Borghesini on the Poggio. The campanile of Santo Spirito, the most beautiful of the kind, and that of St. Majano, are also his designs. But the lantern of the cupola of Santa Maria del Fiore did not contribute much to his honour.

* This palace was built in 1520, and is opposite to the church of Santa Trinita. Its plan is very simple and well arranged; the whole height is divided into three stories, and of good proportion. He inscribed over the principal door the inscription, "*Carpere promptius quàm imitari,*" as an answer to the revilers of his style. The motto, "*Per non dormire,*" placed on the frieze over each of the windows, belongs to the arms of the family of Bartolini. The interior court has four loggias, one over the other: the stylobates of the first and second are decorated with arabesque ornaments. The architecture, both within and without, is tastefully decorated.

Notwithstanding the care of the Tuscans in preserving whatever belongs to them, Brunelleschi's design had been lost; Baccio made another, and had executed the eighth part of it, when Michael Angelo returned from Rome: he observed, that in executing this work, some of the masonry, intentionally left by Brunelleschi, must be cut away; and compared it to a cage, not because destitute of proportions, but because, when compared with the great cupola, it was small and insignificant. It appears that Baccio had not considered the general scale of the whole. Michael Angelo made a design for it; but, in consequence of the disputes which arose, the cardinal Giulio de' Medici remained undetermined, and the drum of the cupola without columns to surround it. Some attribute to him the palace Salviati at Rome, others to Nanni da Baccio Bigio. Be it by whom it may, the architecture of this great edifice is ugly and discordant, particularly the entablature.

Baccio died at the age of eighty-three. Giuliano his son, also a carver and architect, succeeded to the direction of his father's buildings. He erected at Montughi, without Florence, a small house for Francesco Campana, well ornamented, and judiciously arranged. But, in the model which he gave for the great altar and the choir of Santa Maria del Fiore, he shewed himself destitute of ability and invention.

Domenico, another son of Baccio, exhibited a genius for architecture; and, had he not died young, would perhaps have surpassed his father.

NOVELLA DA SAN LUCANO, A NEAPOLITAN,

STUDIED at Rome, and restored the church of San Domenico Maggiore at Naples, removing all the Gothic parts that he could. A fine opportunity presented itself of displaying his talent, 1470, in the palace of Roberto Sanseverino, prince of Salerno, and high admiral of the kingdom, who gave no other direction to the architect than to make the most sumptuous edifice that had ever been seen. In ten years the work was complete. It is of travertine stone, worked to resemble the points of a diamond, and was afterwards presented by D. Isabella Feltri della Rovere, princess of Bisignone, to the Jesuits, who, under the direction of the father Pietro Provano, a Jesuit, constructed the church of Il Gesu Nuovo, now Il Salvatore. The plan was a Greek cross, of a good form, with a magnificent cupola, which in 1688 was entirely destroyed. In less than seven months it was rebuilt: it is the richest church of Naples, but has too many ornaments, is not well executed, and has a façade like a prison. After the dispersion of the Jesuits and the wandering brothers, it became the property of the Zoccolante order, (wooden-shoe friars) to whom it still belongs, the cupola being dismantled.

GABRIELLO D'AGNOLO, A NEAPOLITAN,

A contemporary with Novello, built the church of San Giuseppe and that of Santa Maria Egiziaca, for which he acquired so much credit in Naples, that D. Ferdinando

Orsini, duke of Gravina, confided to him the construction of his palace in preference to San Severino. This edifice is rusticated throughout the whole of the ground floor, which serves as a basement to the upper story: the latter is ornamented with fluted Corinthian capitals, in the manner of Serlio. The whole mass is heavy, the pilasters are too far apart and ill proportioned, the windows badly decorated. It is nevertheless one of the best edifices in Naples. Another story has since been added, which does not harmonise with the rest. The great door has also been ornamented, and evinces a modern taste.

GIAN FRANCESCO MORMANDO, A FLORENTINE,

(Born 1455, died 1552,)

STUDIED architecture under the celebrated Leon Battista Alberti. After visiting the antiquities of Rome, he retired to Naples, and became the friend and competitor of the two preceding architects. The church of San Severino, one of the most conspicuous at Naples, is of his building. By this work he acquired so much fame, that Ferdinand sent for him to Spain, where he wished him to build a palace and a church; but his principal occupation was to sing and play on the lute; whence the monarch nominated him not only his first architect, but his first musician, and consequently rewarded him doubly.

On his return to Naples, he continued the church of San Severino, and made some additions to the monastery. In order to equal the two last-mentioned palaces of the dukes of Gravina and Salerno, the duke de Viestri ordered Mormando to erect one for him, now called Filomarini,

belonging to the princess della Rocca : an edifice which has suffered much in the various insurrections ; but there is sufficient remaining to shew the ponderous taste of the times. Mormando also designed the palace of Cantalupo, on the beautiful river Posilippo. He built many other edifices, among which is the small church della Stella, near San Severino, rebuilt, embellished, and endowed at his own expense.

SIGISMONDO DI GIOVANNI, A NEAPOLITAN,

Was a disciple of Mormando. He built Il Seggio di Nido, in which the piers have Gothic ornaments, and a cupola above well formed. This vault or cupola produced him so much repute, that he was entrusted with that of San Severino, according to the model made by Mormando. Such works were then new at Naples, and considered extremely difficult to execute.

ANTONIO FIORENTINO,

(Died 1570.)

Was born at Cava, near Naples ; he studied architecture at Rome, and establishing himself at Naples, built the church of Santa Caterina à Formello, with a cupola, which is considered, though without any apparent reason, to have been the first in that city.

BALDASSARE PERUZZI,

(Born 1481, died 1536,)

WAS born at Volterra,* where his father, Antonio Peruzzi, a noble Florentine, had retired during the civil wars of Florence. But Volterra being afterwards sacked, this illustrious family lost every thing, and fled to Sienna, where they lived in poverty. Baldassare devoted himself to painting, went to Rome, where he excelled in his knowledge of perspective. He afterwards applied himself to architecture, and erected many buildings in Rome. Removing to Bologna, he made two designs for the façade of San Petronio, one modern, the other Gothic, with many others extremely ingenious, in order to unite the old building with the new, without spoiling the former. He built the gate of the church of San Michele, in Bosco, and embellished the monastery of the monks di Monti Oliveto, without Bologna. He also made the design and model for the cathedral of Carpi, which was built under his direction, after the rules of Vitruvius. Being called to Sienna, he fortified that city; on his return to Rome he was employed by Leo X. in the building of St. Peter's, and this pope thinking that the idea of Bramante was too vast, Baldassare made a fresh model, both magnificent and ingenious. According to the account given of it by Serlio, it was to have been a Greek cross, terminated at the four extremities semicircularly. Between these extremities were four square sacristies, over which bell-towers might be erected. At each of the extremities was a semicircular porch, through which, by three openings, orna-

* Vasari, tom. vi. p. 101.

mented with four isolated columns, was the entrance to the temple. The great altar was in the centre, encompassed by four large piers, supporting a cupola 138 feet in diameter. This temple consisted of two naves, which cut each other at right angles; in the centre was the great cupola. Each nave had two side aisles, and where these intersected each other, were placed four cupolas, 48 feet in diameter. This design is conceived with so much judgment, that it merits an attentive consideration in Serlio, as every part of it served afterwards for a model to the succeeding architects.

The tomb of Adrian VI. in the church of dell' Anima, was built by Peruzzi. For Agostino Chigi, at Longara he erected that small palace which, coming into the possession of the Farnese family, has since been called La Farnesina. Peruzzi himself ornamented it externally with historical representations in terra cotta, which are now obliterated. The hall was decorated with columns, drawn in perspective, which made it appear much larger than it really was: but the most extraordinary thing is the loggia in the garden, in which this architect and painter represented the fable of Medusa; Perseus, and some other figures, are in the corbels of the roof: the ornaments drawn out in perspective are so natural and vivid, that the most learned in the art have taken them for relieve. Titian was so convinced of this, that he climbed up to touch them; although he himself painted Charles V. so naturally, that placing the likeness on a table, it is said his own son Philip II. spoke to it, really taking it for the emperor. Raphael, also, drew Leo X. so to the life, that a cardinal, imagining it to be really the pope, offered it the pen and ink to sign a bond. In this there is no exaggeration; the sublimity of painting, however, does not consist in such deceptions, which are only exercised by painters of ordinary works. The architecture of the above-named palace is well arranged, with regard to convenience, but the

small Doric pilasters, which are repeated in the second story, like those in the first, are formal. The frieze in the first story is without the usual ornament, and the cornice is almost entirely suppressed. The whole is beautiful.

For the representation of a comedy by the cardinal Bibiena, played before the pope, and the first composed in prose, Peruzzi painted two scenes, which have served as examples for whatever has since been done of that kind. He also directed the preparations for the coronation of Clement VIII. In the dreadful sacking of Rome, in 1527, in which so many persons, unable to endure the insults offered them, killed themselves in despair, Peruzzi fell into the hands of the Spanish soldiers, who, from his noble and graceful aspect, taking him for a prelate of high rank, used him most barbarously, to make him discover some imagined treasure; but finding him at length to be a painter, they forced him to draw the likeness of Charles le Bourbon, and sent him away covered with wounds.

He fled to Porto Ercole, and from thence to Sienna, where he arrived perfectly naked, having been stripped on the road. He was well received by the citizens, executed many public and private works, and shewed his patriotism in refusing to obey the pope, who wished to employ him as an engineer at the siege of Florence.

On his return to Rome, he made many designs for palaces for the Orsini family, erected some buildings near Viterbo, others in Puglia, and continued his studies in mathematics, and on Vitruvius, to which he added some commentations, drawing the figures himself. The court of the palace of the dukes d' Altemps, in Rome, is commonly thought to have been built or restored by Peruzzi. The style is simple, but noble, and there are evidences of some intended alteration.

The most difficult and considerable work of this architect, is the massive palace near San Pantaleo; its form

is oval, and produces both a novel and beautiful effect. The façade is entirely of smooth stone-work, and has an ingenious and well-proportioned vestibule, with insulated Doric columns, sustaining an architrave. This architrave is continued through the portico over the small pilasters, opposite the columns. The middle intercolumniation answering to the door is the largest, the others are narrow; the columns are placed two and two, as are also the pilasters on each side the portico of the façade. The Doric order is plain, and the soffite within the portico highly ornamented, consequently, not uniform with the general simplicity of the order. The door is well proportioned, but has too many dentils and modillions; the portico is terminated by two large circular niches, which reach to the ground: the soffite of the vestibule is minutely ornamented, as are also those of the two porticoes in the court, which are opposite to each other. The Doric order of the court, has a cornice and architrave, the guttæ of which, are very exactly disposed. The door and windows of the first floor are in a good style. The confined and narrow situation of the edifice, only serves to shew the greater ability of the architect. He, however, did not see the completion of it; he died suddenly, it was said, by poison, administered to him by some one jealous of his superiority. Peruzzi was, from the hour of his birth, the child of misfortune. He was a learned and clever architect, and remarkably industrious, but his extreme modesty prevented his ever asking a reward for his labour; and though employed by some of the richest nobles, they had not the liberality to offer it to him. As architect of St. Peter's, he received two hundred and fifty crowns a year, and with this he had to support himself, a wife, and children. But however great an evil poverty may be, who would not desire to be the poor but excellent Peruzzi, rather than possess riches accompanied with ignorance and illiberality? When at the point of death, pope Paul

sent him 100 crowns, with many useless offers of assistance. He was buried in the Pantheon, by the side of Raphael, but there are no remains of his inscription. Artists of every denomination assisted at his obsequies.

After his death his reputation increased, especially when the building of St. Peter's was continued, in which Antonio Sangallo met with a number of difficulties.

ANTONIO SANGALLO,

(Died 1546,)

WAS the son of a cooper* named Bartolomeo Picconi, of Mugello, in the Florentine state. In his childhood he learnt the business of a carpenter at Florence, but going to Rome, was there dazzled by the fame of his maternal uncles, Giuliano and Antonio Sangallo. He was by them instructed in architecture, and from the latter received the surname of Sangallo. He was also a disciple of Bramante. His first work was the church of the Madonna di Loretto, near Trajan's column. Externally it is square, with small Composite pilasters coupled, on a high plinth. Over this square building, as if raised on an upper basement, is a double cupola, with an octangular drum, rather too lofty. The interior is also of that form, and the cupola, which covers the whole building, is consequently the same. The form of the doors and windows is bad, and their ornaments heavy and useless. We must, however, acknowledge, for the honour of Sangallo, that the small cupola, which is in a most extraordinary style, is by Giacomo Del Duca, a Sicilian. He afterwards built the

* Vasari, tom. vii. p. 173.

small palace near the gate of Venice, which now belongs to the counts of Parma; it is well proportioned and arranged, and the windows ornamented with great simplicity, but the pedestals of the columns which flank the great door, and those in the court, are immoderately large. He erected the Pasquino palace di Santo Buono, and various other edifices within and without the walls of Rome.

His reputation increasing, he was appointed architect of St. Peter's, and to repair some rooms in the Vatican and Loggias, in the building of which Raphael had left open spaces, to please some persons who wished to insert small cabinets.

Pope Leo X., desiring to fortify Civita Vecchia, a number of designs were made by various engineers, but that of Sangallo was preferred. Whether it was ever carried into effect is uncertain.

The church of San Giovanni de' Fiorentini, having been very imprudently placed on the borders of the Tiber, in the Julian Way, by Giacomo Sansovino, Sangallo strengthened it on the side next the river, but at an expense sufficient to have built the whole edifice, and made a model for a new church, which was not executed. He restored the fortress of Montefiascone, now destroyed; and in the great island of the Lake Bolsena he constructed two small temples, one octangular without and circular within, the other square without and octangular within, with four niches at the side faces, of a beautiful order. He repaired the church of San Giacomo, belonging to the Spaniards, at Rome; erected the church of Monserrato in the same city; the façade of the bank of Santo Spirito; and rebuilt the court in front of the Loggia of the Vatican, which was afterwards altered by Julius III., for the purpose of removing the granite columns to his vineyard without the Porta del Popolo. Sangallo was sent by Clement VII., with Sanmicheli, to fortify Parma and

Placentia. On his return to Rome he enlarged the Vatican with the chambers for the public consistories, and many others. The great excellence of this architect consisted in solidity, the most important part of architecture, as is evident in all his buildings, particularly at Loretto, where the church of the Madonna, which was in danger of falling, was by him admirably repaired and embellished throughout, the proportions of the original being retained : a far more difficult work than the raising a building from the ground. After the taking of Rome, Clement VII. took refuge at Orvietto, where being a scarcity of water, Sangallo walled in a well with stone, 50 feet diameter, with two flights of spiral steps, one within the other. By these the descent to the bottom was so contrived that the beasts entered at one gate, descended, and were laden with the water ; then, turning round, they passed by the other branch of steps a gate in an opposite direction. This convenient erection, conducted with so much ability, and lighted from top to bottom by windows in the staircases, was completed with extreme quickness. The covering of the well remained to be made, which was afterwards done by Paul III., but not according to the design of Sangallo. There is a similar one in the castle of Chambord, a pleasure-house of the king of France, and another at Turin.

Sangallo designed the fortress at Ancona, another at Florence, near to Porta à Prato, and fortified Castro, given by Paul III. to Pier Luigi Farnese, for whom he built a palace, and many beautiful and noble habitations for private persons, all of which are now destroyed. When the emperor Charles V. passed through Rome, after his victory over Tunis, Sangallo had the direction of all the festivals given in honour of the monarch. Before the palace of San Marco, in the square of Venice, he erected a triumphal arch of four Corinthian columns. The architraves, frieze, and cornice, projected over each column,

between which were two Victories, so that in every division were four Victories; in the whole eight, illustrative of the various actions of the emperor. In the pediment were two figures in rilievo, representing emperors of the house of Austria. At the four angles were four prisoners, with a number of trophies, in rilievo. This was a most superb work, both for the invention, the proportions, and the embellishments in painting and sculpture, but it was transitory, being of wood, silvered and gilt, and, when the festival ended, it was taken down perfect.

The indefatigable Sangallo built for the duke de Castro the fortress of Nepi, raised the streets of that city, and made a number of designs for houses and palaces for the citizens, raised a number of bastions at Rome, and erected the gate of Santo Spirito, a magnificent and solid work, resembling one of the masses of antiquity. Two hundred years have elapsed, and it still remains perfect.

He rebuilt almost the whole of the Vatican, which had become ruinous in many places, and particularly on the side of the Sistine chapel. He enlarged the hall in front of the chapel, and made for the two side lights the large windows, and adorned the vaulting with beautiful stuccoes. He also erected the Pauline chapel, an elegant building for the exactness of the proportions, and made a variety of ingenious staircases, leading from the chapel to St. Peter's.

The fortresses of Perugia and Ascoli were erected by him with incredible quickness. In the Julian street at Rome he built a noble palace for himself, which now belongs to the marquesses Sacchetti, and has been much enlarged. The windows of the first story are too massive, the mouldings confused, and the corbels too large and have too much projection.

But the grandest study of Sangallo was St. Peter's, for which he made designs quite different from those of Bramante. Labacco, his servant, made the model of wood,

which is now preserved in one of the rooms at Belvedere, behind the great niche; it cost 4184 crowns.

This model did not please Michael Angelo, who considered it broken into too many parts, and that the two bell-towers, the four mole tribunes, and the large cupola, with an infinity of small columns, would convey the idea of Gothic building rather than of the antique.

Sangallo enlarged the piers of St. Peter's, and filled the foundation with so much solid material, that if all this hidden mass were exposed to view, the strongest imagination would be astonished. The grand Farnese palace was begun by Sangallo, while Paul III. was cardinal; and when he became pope it was enlarged, and the façade carried up by this architect as far as the cornice. The pope wished this cornice to be the most beautiful that had ever been seen; and all the most able artists in Rome were employed to make designs.

The pope had all the designs shewn to him, and after having more particularly praised that of Michael Angelo, much to the displeasure of Sangallo, he desired to see one by Melighino. At such a proposal Sangallo could not restrain himself, and exclaimed in extreme resentment, that Melighino was a mere mountebank of an architect. The pope answered, with a courteous smile, "We wish Melighino to be really an architect, and will therefore take care to provide for him." Melighino was of Ferrara, and after having, as it is believed, served the pope a number of years in the quality of groom, was desirous of becoming an architect. He had the care of Belvedere, of the pontifical buildings, and was declared by the pope architect of St. Peter's, with the same stipend as Sangallo. It is such persons that corrupt the fine arts. The cornice was afterwards placed by Michael Angelo, who rebuilt the palace in another form, as will be seen in his life, excepting what had been done by Sangallo. Between the porticoes of the ground floor the latter made

two doors and four windows, after the style of those mentioned by Vitruvius, but they have a bad effect from the diminution of the architraves. The interior door is 7 feet high, and half that in width, which is small for so large an edifice. The windows of the second story, whether by Sangallo or not, are monstrous beyond description, both on account of having triangular pediments over round windows, and columns placed on corbels almost in the air.

Sangallo was sent by the pope to settle the disagreement between the inhabitants of Terni and Rieti, concerning their right to the lake of Marmora. He terminated the strife with extreme difficulty, dividing the lake between them. From cold and vexation, Sangallo was taken ill at Terni, and died. His body was carried to Rome, and, accompanied by all the professors, was deposited at St. Peter's, near the Sistine chapels; but his epitaph, placed there by his wife, Isabella Deta, is no longer visible.

Antonio Battista Gobbo, his brother, was also an excellent architect. He generally assisted in the buildings of Sangallo, made many marginal notes on Vitruvius, enriched the work with various well-drawn figures, and finally translated it. This translation is no longer in print, nor would it be useful on account of its obscure style.

FRA GIOCONDO, OF VERONA,

(Born 1435,)

WAS a Dominican friar,* extremely learned in philosophy and theology, and skilful in architecture. From his youth

* Vasari, tom. vii. pref. p. 21.

he studied with great attention the models of antiquity at Rome, an account of which he collected into one volume, and sent it as a present to Lorenzo the Magnificent, the patron of literature.

He remained some years with the emperor Maximilian. The bridge of stone at Verona requiring repairs, and the foundation of the middle pile having been several times injured, Giocondo suggested the means of strengthening and preserving it. He surrounded it with double piles, which he drove into the bed of the river, and prevented the water, which was extremely rapid, from washing away the earth below the foundation. By this means he effectually repaired the pier. A few years since it was carried away by a flood, together with the bridge.

He made many observations on the Commentaries of Cæsar, which are printed, and was the first who gave a design of the bridge constructed by that general over the Rhone, and illustrated the text, which till then had been but ill understood; he also corrected many errors and obscure passages in Vitruvius, but there is still much wanting to make that work perfectly clear. He amended Frontino on the Aqueducts, and published Giulio Ossequente, Aurelius Victor, and Cato "De Re Rusticâ."

Louis XII. sent for him into France, to execute a variety of works, among which the two bridges over the Seine, supporting shops, acquired Giocondo a great deal of reputation, together with the praises of Sannazaro, who wrote on him a distich, which is here given, merely to shew the follies which in those times were esteemed beauties:—

Jocundus geminum imposuit
tibi, Sequana, Pontem;
Hunc tu jure potes dicere
Pontificem.

The bridge of Notre Dame has five arches, each 54 feet span, and 40 high from the water. The four middle

piers are each 15 feet and a half thick, which, with regard to their span, is as 2 to 7. Their length, which determines the width of the bridge, is 82 feet, not including the triangular piers, which project 12 feet. The arches are 4 feet thick. The whole is of hard stone, and considered by Scamozzi to be the best-constructed work in Paris.

While Giocondo was at Paris, he discovered, in an old library, a manuscript, containing the greatest part of Pliny's letters, — a very important discovery for architecture: they were afterwards printed by Manutius. The public hall at Verona, and the fortifications at Treviso, are thought to be the work of Giocondo.

But the scene of this friar's greatest efforts was at Venice. This city was in danger of losing those natural important bulwarks, its Lagunes, which were continually covered by the overflowing of the Brenta. Opinions were offered by different architects, but that of Giocondo prevailed, and was executed; it consisted simply in turning half of the overflow towards Chioggia. Thus, in the course of time, a great part of the sea round Chioggia was converted into a fertile and habitable country, and the Lagunes of Venice remain. It is therefore with justice that Luigi Carnaro, the most distinguished chevalier of his time, called Giocondo the second founder of Venice, in which city many of his writings are preserved under the care of the magistrates, who superintend the canals.

There afterwards happened a great conflagration at Venice, which destroyed almost all the quarter of the Rialto. Giocondo made a noble design, not only for a magnificent bridge, but for the whole of the part burnt, with regular streets, squares surrounded with porticoes for the superior artificers, palaces, and temples. But the design of one Zanfrignino, or Scarpagnino, was preferred; which was a mere mass of buildings, without solidity, beauty, or symmetry. Giocondo, indignant at the rejec-

tion of his plan, withdrew from Venice, with a fixed determination never to see it again.

As the designs remained in the family Bragadini, the Rialto was built some time after, and, it is supposed, according to the design of Giocondo, but it was the work of one Jacopo, or Antonio da Ponte. Notwithstanding its great fame, it has no other value than that of being a mass of stone, formed into one large arch, 66 feet span, having on the ridge two rows of shops, of the worst architecture that can possibly be imagined. The third arch of the bridge at Verona, which leads to the castle, is the largest in Italy, and is 142 Veronese feet span.

Giocondo retired to Rome, where he was declared architect of St. Peter's, after the death of Bramante. In conjunction with Raphael and Antonio Sangallo, he rebuilt that immense fabric which Bramante, from his great haste, left, with many other works, extremely weak. These architects had large square pits dug under the foundations, at a convenient distance from each other, which were filled in with a wall, built with great care; between these and some new piers strong arches were turned over the earth: thus the whole fabric, which was till then unsafe, was placed on a solid and new foundation. Giocondo repaired the stone bridge at Verona, which had been injured by the overflowing of the Adige.

He first surrounded the pier with piles below, so that the current could not undermine it: he then built an arch, which extended over the two middle ones. Thus the street which is over the bridge, is no longer supported by the two arches, nor by the lower pier, but by the upper arch, which covers the two middle ones. The more to relieve the pier, he left an ample passage for the water to pass off easily. Hence, although there are five arches to this bridge, four only support the weight above.

Giocondo lived an exemplary life, beloved by cotemporaries in literature, as Calderino, his countryman, San-

nazaro, Budeo, Aldus Manutius, the master of Julius Caesar Scaligero. He died at an advanced age, but it is not known at what period, nor where.

PIETRO LOMBARDO, A VENETIAN,

AN architect and sculptor, who, in 1482, by order of Bernardo Bembo, then governor of Ravenna, a town under the dominion of Venice, sculptured the burial-place of Dante, in the form of a chapel, near the church of San Francesco. He also built at Venice the church of St. John and St. Paul, of a quadrangular form, with an elevated chapel at the extremity, the ascent to which is by sixteen steps, ornamented with a balustrade. The whole interior is rich in marbles and sculpture. The exterior is of two orders, the first Corinthian, the second Ionic, divided into arches, supporting a rich entablature, over which is a circular pediment, also ornamented. This composition is in the Greek style, which was then just renewed. The clock-tower in the square of San Marco does him great honour. A vaulted portico, supported by Corinthian columns and pilasters, appears majestically to rise from the piazza: then follow three stories, ornamented with Corinthian pilasters, each having a cornice. In the first is the dial-plate, in the second a tabernacle, with a Madonna in metal, in the last a large lion in marble; at the top is a terrace and the bell, on which the hours are struck by two bronze giants. The edifice is enriched with marbles, mosaics, and gilding. Columns are also introduced, but it is difficult to imagine their use. He built and sculptured the sepulchre of the cardinal Gianebattista Zeno, in San Marco, assisted by his sons,

Tullio and Giolio Antonio. He rebuilt, after a very convenient plan, the warehouse of the Germans, which had been destroyed by fire; he designed the church of Santa Maria Mater Domini, with one nave and a transept; the school of the Misericordia, the cloister of Santa Giustina at Padua, and many other edifices, assisted by his sons, who were equally competent with himself.

MARTINO LOMBARDO, A VENETIAN,

Was probably of the family of the preceding architect. His most considerable work is the school or Confraternita di San Marco, consisting of two ample halls: one on the ground floor, distributed into three naves, by two files of Corinthian columns; the other in the basement, with a chapel at the end, which is divided from the hall by three intercolumniations. These halls are well arranged; the façade is of various marbles, with mouldings in good taste. It is possible that the church of San Zaccaria is by him. The façade has two orders, with a curved pediment. It is much in the style of the preceding edifice.

Moro Lombardo, architect of the church of San Giovanni Grisostomo, is supposed to be his son.

BARTOLOMEO BUONO, OF BERGAMO,

(Died 1529,)

AN architect and sculptor of merit.* He built the church of San Rocca at Venice, 1495, in a very simple style, with Corinthian pilasters. It was restored with the same simplicity by Giovanni Scalfuratio, a celebrated architect, who died in 1764. The statue of San Rocca, within this church, is by Maestro Buono, and also the three small ones of the great altar in the church of San Geminiano.

The greatest work of Buono was the old building of the Procurazie, divided into three orders: the first is a porch of fifty arches towards the piazza of San Marco, which reaches from the clock-tower to the angle of San Geminiano, where, with five other arches, it turns in an easterly direction, and rests on the above-named church; the second and third stories are a double series of smaller arches, with windows, two of which correspond to each arch of the inferior portico, with fluted Corinthian columns supporting the arches. The upper part of the building is majestic; it has circular windows in the frieze, and over the cornice a series of elegant vases. This edifice projects too much over the superb piazza. We shall speak hereafter of the new Procurazie.

In 1510 Buono built the room which contains the bells in the tower of San Marco, which had been several times injured by lightning, placing above the cornice an attic, and finally a pinnacle at the top. This tower has two conductors, one within the other; the external one being six feet distance from the internal, which is the diameter of the staircases within.

* Vasari, tom. i. p. 248.

TULLIO AND ANTONIO LOMBARDO,

SONS of the before-named Pietro, were sculptors and architects. The bas-reliefs in the chapel del Santo, in Padua, are beautiful works by these artists. Tullio built the church della Madonna Grande at Treviso, three chapels in the church of San Paolo, and the chapel del Sacramento in the cathedral. In Venice he built the church of San Salvatore on a very singular plan, that is, a patriarchal cross with three transepts, one long one at the extremity, and two smaller ones below it. These three transepts are formed by three grand arches, which are carried up to the roof. Within these arches are placed other smaller ones on each side, which form four chapels. The principal pilasters which support the roof are Corinthian, with pedestals and cornices, and at the sides are lesser Ionic columns, which decorate the chapels. This work is much admired for its unity and elegant appearance.

SANTÉ LOMBARDO,

(Born 1504, died 1560,)

NEPHEW of the last architects, and son of their brother Giulio, built at Venice the façade and steps of the school of San Rocca. The latter have two distinct branches, which lead to an ample landing, from whence the ascent is by another branch, separated from the two first, and illuminated by a cupola: the width of this superior branch is nearly equal to that of the two first together, the

approach to which is decorated by columns supporting arches;---a beautiful idea, and well executed. The façade has two orders of fluted Corinthian columns and pilasters, not diminished by a profusion of ornaments and marbles: it is much admired. The palace Vendramini is, however, much more worthy of notice, not for its three orders of Corinthian columns, but for a well-proportioned whole, and a superb entablature, which cannot yield to the most admired of the kind. It is thought, also, that the Trevisani palace at Santa Maria Formosa, and that of Gradenigo, were by this architect.

GUGLIELMO BERGAMASCO.

AMONG the works of this architect, the Capella Emiliana de' Camaldolesi, at Murano, is much admired. It is a species of hexagonal temple, 20 feet in diameter, with three altars and three doors alternately. That side against which is the great altar, and that of the principal entrance, are much larger than the others. The Composite columns between the arches are on pedestals, with a good entablature. Although hexagonal, this edifice is covered with a double round cupola, and is attached to the great church on one side; the other sides are adorned with doors, niches, statues, and columns. Between the church of the Fathers and this temple is a pentagonal vestibule, of unequal sides, with twisted Ionic columns supporting a small round cupola.

Guglielmo also built the public palace of the Camerlinghi at the foot of the Rialto, the Tacca palace in Portogruaro at Friuli; and to him is also ascribed the grand gate, called the Portello of Padua, and that of San Tommaso at Treviso.

GIOVANNI MARIA FALCONETTO, OF VERONA,

(Born 1458, died 1534,)

WAS a good painter, as was also his father, and many of his ancestors.* He applied himself to architecture, and drew all the antiquities of his illustrious country. For this purpose he went to Rome, where he remained twelve years, excavating in various places, in order to discover the plans of the ancient edifices, which he measured and delineated. He also copied the antique sculptures of Rome, those of the surrounding neighbourhood, as well as those of the kingdom of Naples. He was much respected by the emperor Maximilian, then master of Verona, where Falconetto performed many excellent works. After many misfortunes, he retired to Padoua, and was received by the cardinal Bembo and by Luigi Cornaro, where he was celebrated for the sobriety of his life, and the urbanity of his manners. This senator thinking himself highly gifted, and being well versed in architecture, built a palace from his own design near Santo, in Padoua. Falconetto erected a loggia in front of the court, beautifully ornamented, which is considered a masterpiece, consisting of two stories of five arches, the first Doric, the second Ionic. In the same city he built a Doric gate to the palace of the governor, the gates of San Giovanni and Savonarola, the church of the Madonna della Grazie for the Dominican fathers, and an edifice for music and other diversions, small but light, and called by Serlio the Rotonda di Padoua. It appears that it gave Palladio the idea for the beautiful country house called by the same name, belong-

* Vasari, tom. vii. p. 82.

ing to the counts Capra. * Falconetto began a superb palace in the castle Usopo, at Friuli, for Savorgnano, but, in consequence of the governor's death, it was never finished. He went to Pola, to study the ancient monuments, and was the first who drew the theatre and amphitheatre. Falconetto was fond of the magnificent; he made a number of designs and models for grand edifices, which were never required to be executed, and refused to erect many common buildings for private persons. The journey to Rome was so familiar to him, that happening to have a dispute with an architect about the admeasurement of some entablature, he suddenly set off to Rome to decide it. He was extremely fond of studying Vitruvius, and was the first to introduce a good taste in architecture in the Venetian states. He is also said to have invented many things which were afterwards ascribed to Buonarotti. He made designs for a mausoleum for the family of Cornaro, where he died. The prince had for him the affection of a brother, esteeming him for his great knowledge in architecture, and valuing his society on account of his facetious manner and smartness of repartee. He had him buried in his own sepulchre.

PIETRO COECH,

(Died 1551,)

WAS born at Alost, a city of the Low Countries, and went to Italy to perfect himself in drawing. He returned an architect, sculptor, and engraver. He executed many works in his own country, which acquired him wealth and fame. His desire of knowledge led him to Turkey, where he made a series of drawings, representing particular cere-

monies of the nations he had seen. The emperor Charles V. nominated him his painter and architect. He has left many treatises on geometry, architecture, and perspective.

GIROLAMO GENGA, OF URBINO,

(Born 1476, died 1551,)

WAS first intended for a clothier;* but having been discovered several times drawing secretly with a pen, Nature, jealous of her rights, led him to painting, whose votary he would never have been, had he followed the intention of his father: he, however, became great in that art, as well as in architecture. For the duke d'Urbino he built a palace on the imperial mount near Pesaro, so well furnished with colonnades, rooms, courts, galleries, fountains, and delightful gardens, that all the princes who travelled that road went to see it, and among them pope Paul III., on his way to Bologna. At Pesaro he restored the court of the palace, and built the church of San Giovanni Battista, which is the most beautiful in that part of the country. He gave a design for the convent of the Franciscans of Monte Baroccio, and for the bishop's palace of Sinigala. He was afterwards sent for to Mantua, where, after having repaired and embellished the episcopal palace, he erected the façade to the cathedral, of such graceful proportions and composition, that it is considered one of the finest specimens of architecture.

Genga was also a sculptor, well acquainted with music, judicious in argument, graceful in demeanour, and cour-

* Vasari, tom. viii. p. 223.

teous and affectionate to his relations and friends. From him is descended the honourable and distinguished Genghi family.

BARTOLOMEO GENGA, OF URBINO.

(Born 1518, died 1558.)

HIS masters were his father Girolamo, Vasari, Ammanati, and, above all, the antiquities of Rome, which he studied with great attention. For the duke d'Urbino he built a beautiful palace at Pesaro, and made an ingenious design for the gate of that city, which, from various accidents, was never executed. He also built the church of San Pietro at Mondavio, which, for so small a thing, is unequalled. He understood fortifications, and might have been employed by the king of Bohemia and the Genovese, but the duke d'Urbino would not allow him to leave. However, through the entreaties of a Capuchin, who pointed out that religion was to be benefited, the duke granted him to the knights of Malta, two of whom had been sent expressly to Urbino by the grand master, who was about to fortify the island, and reduce several villages into two cities. These two knights having remained at Urbino two months, soliciting the duke, at length succeeded by means of the Capuchin; and Bartolomeo was received at Malta with every demonstration of joy, where, like another Archimedes, he began to put his ideas into execution; but, after having made a model of a city, some churches, and a palace for the grand master, all designed with great regularity and in a beautiful style, he died,—in consequence of endeavouring to relieve himself from the extreme heat by receiving the air between two doors,—at the age

of forty. Nothing could exceed the grief of the knights; the duke d'Urbino wept, and considered it a duty to take care of the children of the deservedly esteemed Genga. He invented a number of curious masks, and was particularly clever in his arrangements for theatrical scenery. He wrote many agreeable sonnets in eight stanzas.

MICHELE SANMICHELI, A VERONESE.

(Born 1484, died 1559.)

HE learnt the elements of architecture from Giovanni, his father,* and Bartolomeo, his uncle, both good architects. At sixteen years of age he was sent to study the antique at Rome, which he did with so much discernment and attention, that he became one of the most illustrious architects of which Italy can boast. His first works were the cathedral of Monte Fiascone, of an octangular figure, beautifully proportioned, with a graceful cupola, covering the whole of the church; the famous temple of San Domenichino in Orvieto, and a number of beautiful small palaces in both cities. Sanmicheli having acquired a great reputation, was sent by Clement VII., in company with Antonio Sangallo, to visit the fortifications of the ecclesiastical states. Having executed this commission, he revisited his own country, and then, from motives of curiosity, and a desire to gain instruction, he set out to observe the fortifications of the Venetian dominions. While at Padoua he was taken by the governor as a spy, but, having proved his innocence, he was immediately set at

* Vasari, tom. viii. p. 243.

liberty; and being discovered to be a man of great abilities, he was entreated to remain in the service of the republic. He, however, excused himself, that he could not do so lawfully, being in the service of the pope, but that he would shortly comply with the wish of the republic. In fact, by means of his own entreaties, joined to those of the Venetians, he obtained leave to quit the pontiff, to employ himself for the benefit and ornament of his own country.

To Sanmicheli is owing the glory of inventing the military architecture now in use. The northern powers claim the merit as theirs. Pagan, Blondel, Vauban, Scheiter, have had the credit of being the inventors of the present system of fortification, and Sanmicheli, who really was such, is unknown even to the Italians themselves. Before him all the bastions were round or square. He introduced a new one, inventing the triangular bastion, or, as some call it, pentangular, with plain fosses, flanks, and square bases, which doubled the support; and he not only flanked the curtain, but all the foss of the next bastion, cleared the ditch, and covered and paved the street. The mystery of this art consists in defending every part of the enclosure by a flank; therefore making the bastion round or square, the front of it, that is, the space which remains in the triangle, is undefended; and that is precisely what Sanmicheli effected. Vauban, and many other foreigners, have since modified his inventions.

This clever man made five or six bastions at Verona in this new triangular manner, which have remained more than 200 years. The first he erected at Verona was in 1527, and called delle Madalena, and in this the departure from the old manner and the commencement of the new is evident, the art being as it were in its infancy: in the subsequent ones, Sanmicheli, instructed by his own works, shews his gradual progress to perfection. With this new system he fortified Legnago, Orzi-nuovo, and Cas-

tello. These works received the approbation of all those acquainted with the subject, and particularly of the duke d'Urbino, captain-general of the Venetian troops. His fame became so great, that Francesco Sforza, duke of Milan, asked for his services repeatedly of the Venetians, who at length granted him for three months only. That sovereign was so satisfied with the designs and advice of Sanmicheli, that he loaded him with honours and rich gifts. On this occasion Sanmicheli went to Casale de Monferrato, to see that strong city and its castle, erected by Matteo Sanmicheli, his cousin, an illustrious architect, who also made the noble marble sepulchre in the church of San Francesco, of the same city.

He afterwards visited all the fortifications of the Venetian states, restoring and improving them every where. He left his nephew, Giran Girolomo, to execute his designs at Zara, in Dalmatia, who, after having fortified that city, erected from the foundations the wonderful fortress of San Niccolo, on the mouth of the port of Sebenico. Michele did a great deal at Corfu; and as the war with the Turks was then raging, he fortified Cyprus, Candia, Canaan; Retimo, and Napoli di Romania. From history we learn with what skill the fortifications were erected, which gave the Turks so much trouble. He afterwards planned two bastions at Padoua, and also fortified Brescia, Peschiera, and La Chiusa. So famous were all his works for solidity, that not a stone has moved. His most stupendous work was the fortress of Lido, by the Venetians called Lio, at the entrance of the port of Venice. It appeared impossible that in so marshy a situation, and so exposed to the flux and reflux of the sea, so large a mass could be laid with a hope of security. He, however, planned it with such solidity, using proper materials, and such hard Istrian stone, that it seemed to defy the effect of the waves: it appears cut out of one mass, and resembles a rock,

so large are the stones, and so well united. Externally it is entirely of rustic work. Within it was to have had a beautiful square, which was never perfected, and afterwards (as frequently happens to the works of great men) the idea was changed by those who presumed to know better. The voice of malice and envy then whispered that the heavy artillery required for the defence of the place would, on the firing, destroy the whole building. Sanmicheli, in consequence, requested that the largest cannons might be brought from the arsenal, and being placed both above and below, might be fired off at the same moment. The apprehension of a general destruction was so great, that many ladies withdrew from Venice; a terrible firing took place; the fortress was like a volcano; and the fear that had been excited was converted into joy, when not the least sign even of a fissure was perceived. The architect built also Murano, and was, with his nephew, Giovanni Girolamo, requested to serve the emperor Charles V. and Francis I. king of France, but they both refused, preferring to serve their own country.

At Venice Michele made a model for the monastery of San Biagio Catoldo, which is much admired; the magnificent and rich palace of the Cornari at San Paolo, and the grand Grimani palace near San Luca, on the great canal. In this he gives singular proofs of his great ingenuity and inventive faculties, and various resources for covering the defects and irregularities of the soil. The cornices of this edifice are objected to, as being too wide and too projecting; but it should be remembered that it was finished by various architects, who altered the design in many parts.

At Castel Franco, between Padoua and Treviso, he erected the famous Palazzo Soranzo, the most elegant and commodious villa that it is possible to imagine. At Padoua, in the church del Santo, he built, for Alessandro Contarini, a tomb in a new style, and more like an altar or chapel

than a sepulchre, but solid in its composition and ornamented with suitable figures. No city was more embellished by Sanmicheli than Verona, his native place. The gates are particularly beautiful. Vauban, with other moderns, teaches, that the gates should be situated in the centre of the curtain between two bastions, so as to serve both for a gate and cavalier. Long before this theory, the architect in question had illustrated it by practice. He built the Porta Nuova, a square edifice, supported within by a number of piers of stone, with enclosures or rooms for the guards, places for artillery, portcullis, and other material for defence. The proportion of the whole is correct, and the two ends are of the Doric order. The whole is solid and strong, suitable to the purpose of the building, and totally devoid of all fanciful light ornaments. The work is rusticated, except to the middle gate and the architectural parts. The exterior façade is supported by a wall, with two large pyramidical pilasters of marble, which rise from the bottom of the ditch; at the top are two round inclosures, approaching almost to towers. In the interior to the two gates, near the angles, are two corresponding long passages vaulted, which lead to a number of subterraneous galleries and rooms. There are two ingenious stairs within the angles, covered with a hard stone. Where the inclined stones at the extremity are joined together, they are raised up so as to prevent any water from settling. There is another roof above, for the greater convenience of the soldiers and their ammunition, supported by large pilasters, covered with a parapet. Till then there had never been a gate so magnificent, or so judiciously arranged, nor does it seem possible that posterity can ever have one to surpass it. Some time after this Sanmicheli built the Porta del Pallio, more wonderful than the preceding. The two parapets are of marble, and decorated with a noble Doric order. Externally are immense columns, projecting two thirds, fluted according

to the order, and of one block. These columns are placed two and two; four extend to the middle of the gate, and the other finish the façade of the edifice, which is extensive and much decorated.

The opening of the gate is square, which has a new and pleasing effect: but from the print in Maffei's "*Verona Illustrata*," it appears that the base, which runs round the edifice, does not much improve it. Above is a rich Doric entablature, over which was to have been placed an attic, to serve as a parapet for the artillery; this gate being also used as a cavalier. Before this work was finished the architect died, and his design was not well followed up. Within are ample rooms and other conveniences, for the soldiers. On the city side there is another gallery, which, in the interior, is rusticated with large pilasters, and on the exterior Doric columns half projecting, also of a rustic work, and without bases. At the top is a sculptured Doric entablature, which continues throughout the gallery, both internally and externally. Sforza Pallavicini, governor-general of the Venetian armies, was so delighted with this edifice, that he considered it impossible to find one equally superb in Europe. Sanmicheli also built the gate of San Zenone, solid, magnificent, and well arranged. It is square, with plain Doric columns, divided into squares of rustic work. This gate, although very beautiful, is quite eclipsed by the other.

Besides these military erections, Verona can boast of many specimens of civil architecture by Sanmicheli. The Guareschi chapel in San Bernardino, is a small round Corinthian temple, divided into four compartments by three altars and the door, and with four niches, proper for statues. The altars, pedestals, pediments, cornices, and the arches themselves, are all circular on the plan. The light is admitted by four apertures, each decorated by two columns. Of the eight columns, four have flutes in the regular manner, and the others are spiral: all are left

plain to about a third from the ground, that they might be less injured. The sculptures are beautiful, and the native stone of Verona is shewn in great perfection; it is white, smooth, and durable, and called *bronzina*, because, when working, it sounds like bronze. This beautiful chapel was not finished by Sanmicheli, whose other engagements obliged him to relinquish it to one unequal to the task; he had, therefore, the mortification to see it spoiled, and ardently desired riches, that he might be enabled to purchase it of the proprietor, and finish it according to his own ideas. He gave a design for the façade of Santa Maria d'Orgagno, for the monks of Monte Olivetto, which was beautiful, and in the Corinthian order; it was not commenced till after his death, and still remains unfinished. At San Georgio, Sanmicheli found means so to strengthen the side of the building, that he was enabled to place a cupola on it, which no one else had yet dared to attempt. In the noble temple of the Madonna di Compagna, circular and peripteral, that is, surrounded by columns externally, forming a portico all round, he was much hindered in the execution, and still more so in his excellent design of the Lazaretto, from the contemptible motive of lessening the expense. He also gave a beautiful design for the bell-tower of the cathedral, but through the interference of the vicar-general, it was executed by one who was any thing but an architect. This person made the stairs in the principal wall, and before the building had reached the level of the bells it separated into four parts, as had been predicted. Bernardino Brugnoli, son of a sister of Sanmicheli, rebuilt it, and also San Georgio, after the design given by his uncle.

There are in Verona five palaces by Sanmicheli. The Canossa is well arranged, with regard to its interior convenience. The first story, which is rustic, is rather too high; it has circular windows, with mezzanines above, and an entablature: the second story has Corinthian

pilasters, two and two; each couple being on the same pedestal, except at the angles, where they are not double; and from each of the pilasters projects a half one. The windows of this story are also circular, with a mezzanine above. This palace has been much altered latterly, and defaced by altering the proportions established by the original architect, an ill-proportioned balustrade being placed on the entablature, which produces a miserable effect. It is to be lamented that Verona should be so disgraced by the number of expensive and tasteless edifices daily erecting.

The façade of the Bevilacqua palace is beautifully ornamented. The first story is a rusticated Doric, with a proper entablature, on which is a continued balustrade. The second story has Corinthian orders on high pedestals: some of the columns have straight flutes, others twisted. All the windows are circular; and those at the upper part are alternately large and small, with pediments, some round and some triangular, over which are the square windows of the mezzanine. With the cornice much liberty has been taken. The learned do not attribute it to Sanmicheli; it differs too much from his style, both in character and proportion. The palace of Gran Guardia, on the Brà, which was only partly finished by Sanmicheli, or after his school, shews an excessive taste, and a perfect style of architecture.

The door of the Pellegrini palace is much admired, but whether deservedly is to be determined. It is rather high, probably made so, to render the entrance light. But the entresols between the two stories, the windows of which are in width double their height, appear to crush the pediments of the larger ones below, and certainly detract much from the elegance of the effect.

The first story of the Verzi palace is rusticated, as are also its entrances. The second story has Doric pilasters, between which are circular-headed windows, with pedi-

ments, which look oppressed by the windows of the entrecols. The Pompeii palace is a much better design; the first story is rusticated, without a cornice between it and the second, which has fluted Doric columns: at the angles, these columns are flanked by pilasters. The windows have circular heads, and are too large and too numerous; they have neither pediment, cornice, nor other useless deformities; an elegant balustrade runs through the first story. In short, this palace is considered the best among the five just described. It is to be observed, that Sanmicheli was unfortunate in most of his works: many were, from various causes, not finished by him, and he had the mortification of seeing some completely spoiled, either from interested motives, want of skill, or taste. Others, which remained imperfect at his death, were not better treated — a fate which has too commonly attended the works of the best architects.

The gates of the palace for the administration of justice, and that of the principal magistrate, are also by Sanmicheli. The latter, with Ionic columns, is too low; the fault, it is said, of Giovanni Delfino, then governor, who, not knowing any thing of architecture, obliged the architect to adopt his fancies.

Whilst Sanmicheli was quietly settled in his own country, assiduously applying himself to his profession, and revered by all for his singular worth, he received the melancholy news of the death of his beloved pupil and nephew, Giovanni Girolamo, son of Paolo Sanmicheli. He died at the age of forty-four, not without suspicion of being murdered at Famagosta, in the island of Cyprus, where he served the republic in the quality of military architect. His uncle died suddenly a few days afterwards of grief, and was buried in the church of San Tommaso, the design for which he made, but it was only followed in the upper part.

The morals of Sanmicheli were irreproachable; he was

cheerful but not gay, courteous, liberal to all, and exemplary in the exercise of his religion; never undertaking any thing of consequence without first hearing mass. By means of Giorgio Vasari, he sent fifty crowns of gold to a lady at Montefiascone, then in distress about marrying her daughter, of whom Michele supposed himself the father. This lady confessed to Vasari that the girl was not the child of Michele; she was, however, obliged to receive the money, which to one in such poverty was very acceptable. The Venetian Republic was desirous of making some pecuniary remuneration to Sanmicheli, but he was too liberal and noble-minded to accept it, and requested that his excellent nephews might receive it in his stead. For such great and singular qualities he was esteemed, not only by his fellow-citizens and the Venetians, but by the most distinguished personages in Europe, not excepting many sovereigns; and, what was still more valuable to him, by all the professors of the arts, more particularly by Michael Angelo, who held him in perfect veneration. None of his writings have appeared before the public. There are two of his treatises preserved in Venice by the commissioners of Canals, one on the method of confining the port of Malamocco, to give it a depth, which has since been accomplished; and the other concerning the rising of the Limena, which he considers equal in antiquity with the Brenta.

The genius of Sanmicheli in architecture was sublime. Solidity and convenience, unity, harmony, and simplicity, are conspicuous in all his works. With regard to the use of the orders, he was, perhaps, incorrect. His Tuscan architrave and capital are composed of so many members, that they resemble the Doric. The flutes of his Doric columns are too small for the solidity of that order. To the Corinthian he invariably gave modillions and dentils. He also attached his columns in the walls, and placed them on pedestals, higher than those of Vignola, that is, more than

a third of the height of the order. Finally, to the Doric he put immense pedestals, with a profusion of ornaments, from whence has resulted a door, more than two squares high, so proportioned that the line of the cornice should meet that of the impost.

Luigi Brugnoli married a sister of the before-mentioned Giovanni Girolamo Sanmicheli. He was a skilful architect, as were also his two sons. The elder of these, Bernardino, acquired great reputation from his execution of the bell-tower of the cathedral, and also that of San Giorgio; within the latter church he erected the great altar, of the Composite order, attached to the wall, and which, together with the pediment, follows the form of the niche. To the excellent architecture of this altar is added the beauty of the sculpture, which merits an attentive examination.

MICHAEL ANGELO BUONARROTI, A FLORENTINE,

(Born 1474, died 1564,)

WAS born in the castle of Caprese,* in the district of Arezzo, where his father, Ludovico di Leonardo Buonarroti Simoni, was commissary, or governor. The noble Buonarroti family of Florence was descended from the counts of Canossa. His mother was Francesca, daughter of Neri di Miniato del Sera, and of Maria Bonda Rucellai. When a child, Michael Angelo was taught the Latin grammar, but instead of attending to this tedious study, he secretly devoted himself to drawing; for which he was

* Vasari, tom. x. This author lived on terms of intimacy with Michael Angelo, and wrote his life, whilst he was then living, from which much of the present article is taken.

reprehended and beaten. At length, seeing it useless to thwart his inclination, his father, overcoming the common prejudice that painting was not the proper study for a nobleman, resolved to give him up to the care of Dominico and David Grillandai, with the agreement, that he should remain with them three years, and receive in that time twenty-four florins. The youth soon surpassed all his companions, and even his master. One of the former having copied some female figures drawn by Dominico Grillandai, Michael Angelo took the paper, and with a thicker pen retraced the subject with some fresh lines, exactly as it ought to have been. Grillandai was astonished at such a decided evidence of talent, and from this and several other circumstances, became convinced that his pupil knew more of his subject than himself, having observed that he could copy works, even of the best masters, which fell into his hands.

Lorenzo de' Medici resolving to form a school of sculpture, of which Florence was much in want, Grillandai selected Michael Angelo from the rest of his pupils to send thither. Finding an antique faun, wrinkled, old, and laughing, the nose of which was injured, he undertook to imitate it, and, though he had previously never touched a chisel, succeeded so wonderfully, that Lorenzo was perfectly astonished, especially as Michael Angelo had, in the spirit of whim, widened his mouth, shewing the tongue and teeth. Lorenzo observed to him, — " But you should recollect that old people generally lose some of their teeth." Michael Angelo immediately struck out one, and pierced the gum so naturally, that it appeared as if it had just fallen out. Lorenzo was still more surprised and delighted; he took the youth to his own house, assigned him an apartment in it, treated him as his son, and at table placed him above his own children. Michael Angelo was then between sixteen and seventeen years of age; and in order to assist his father, who was

not possessed of much fortune, his patron allowed him five ducats a month, which were equal to fifteen now; besides which his father was presented with a situation in the Customs. Whilst with this illustrious Mécænas, by the advice of Poliziano, a learned man, and an inhabitant of the Medici palace, he executed a bas-relief in marble, representing the battle of Hercules with the Centaurs. The figures are a palm high, and although not possessing a claim to perfection, they have much more the appearance of a master's hand than that of a youth. He also sculptured a Madonna, in bas-relief, about one foot nine inches in height. These are now in the Buonarroti gallery, arranged by Michael Angelo the younger, in the time of Cosmo II., at the expense of 20,000 scudi.

The great abilities of Michael Angelo, and the fame he consequently acquired, drew on him the envy of many, among whom one Torrigiano gave him so violent a blow on the nose, that the mark remained ever after. He made a Hercules in marble, 7 feet 6 inches high, which remained many years in the Strozzi palace at Florence; it was afterwards taken to France. To Lorenzo the Magnificent succeeded his son Pietro, in every respect the reverse of his father. During one winter, in which there had been a heavy fall of snow, he employed Michael Angelo in the ridiculous work of making statues in that transitory material.

When the Medici family were banished from Florence, 1500, Michael Angelo fled to Venice. He remained a year at Bologna, and made an angel and San Petronius for the arch of San Dominico; and these are the best sculptures on that monument. On his return to Florence, he sculptured the famous Cupid, of which so many various accounts have been given. One is, that Michael Angelo having broken off one arm of his figure, buried it in a place likely to be excavated: when discovered, it was sold to the Cardinal San Giorgio Raffaello Riario, as a

statue of the rarest antiquity, Michael Angelo immediately produced the other arm, to shew how erroneous was the prejudice in favour of the antique. Others say, that this Cupid passed from the duke Valentino into the possession of the duchess of Mantua, who had really an antique, and that, by the advice of Michael Angelo, she shewed first the modern and then the antique; and that every one, on seeing the second, repented of having so much praised the first, the modern appearing little better than a deformity to their eyes when compared with the ancient. Others maintain that the duchess had only one valuable Cupid, which was that by Michael Angelo, and which is still said to be at Venice. It is also said, that the same cardinal, San Giorgio, sent a gentleman to Florence to ascertain if Michael Angelo were really the sculptor of this Cupid; and upon his requiring some proof of his ability, the artist not having any thing finished, took a pen and drew a hand, in a very masterly manner, a print of which is in the Corsini library, engraven by count Caylus. This cardinal, who was attached to, though but very little acquainted with, the fine arts, sent for him to Rome, and kept him in his own house for a year, without giving him an opportunity to display his talents. To be a real patron of the arts it is not sufficient to admire them, knowledge and discrimination are requisite. For a barber of this cardinal's, who fancied himself a painter, Michael Angelo drew a large picture of San Francesco, who received the five wounds. This picture is at Rome, in the church of San Pietro Montorio.

Michael Angelo executed for Giacomo Galli, a noble Roman, and a great admirer of his talents, a Cupid in marble, and afterwards a Bacchus, 10 palms high, with a cup in the right hand, and in the left a tiger's skin, with a bunch of grapes, which a Satyr is endeavouring to eat. This Bacchus is represented intoxicated and reeling, the stomach projecting, the back bent, the head inclined

forwards, and a little on one side. This wonderful and beautiful statue is now in the gallery at Florence; as the hand which holds the cup was accidentally injured, by Michael Angelo himself, some have supposed that to this Bacchus belongs the story attributed to the Cupid. When he executed this statue he was only twenty-four years of age.

For the cardinal Roano, of Amboise, he made the beautiful group of *Pieta*, in St. Peter's, at the altar of the Crucifixion, where it is badly placed, being too high and wanting light. Of this celebrated work there is a copy in marble, made by Nanni di Baccio Bigio, in the church dell' Anima, another of bronze, in Sant' Andrea della Valle, and another of marble at Florence, in the church of Santo Spirito. One day, when Michael Angelo was in St. Peter's, he saw some Lombards admiring this group, and heard one inquire of the other, "By whom was this done?" The latter answered, "By our Gobbo, of Milan." This Gobbo was Cristoforo Salari, a sculptor of much merit. Michael Angelo remained silent, but at night he shut himself in the church, and cut his name on the girdle, which surrounded the waist of the Madonna. Some critics have considered the latter figure too young, and it certainly is so. From the Cupid, the delicate Bacchus, and the elegant limbs of this *Pieta*, we may see how inconsistent is the judgment of those who have characterised Michael Angelo as only capable of executing strong, robust, and herculean figures.

He was sent for to Florence, to work on a block of marble, intended for a giant, which had been begun a hundred years before by Simon di Fiesole, who, not knowing how to manage the hands, left the mass unfinished. Michael Angelo made a David of it, of such an immense size that the tallest man could not reach the knees. In this he has far surpassed the Greeks, who did not acquire much excellence in their large statues. The Gonfaloniere Soderini,

thought the nose of this figure too large. Michael Angelo got upon the bridge of it with a chisel, and his hand full of marble dust, which he threw down with a piece of stone, pretending to lessen the nose, and after having remained there some time he descended, and inquired of the Gonfaloniere how it appeared now. "Oh! now it is to the life," replied the learned Soderini. This statue was placed before the gate of the old palace in 1504, where there is still some ancient sculpture of Maestro Simone, left there by Michael Angelo: there is one shoulder which is not quite perfect, for want of a sufficiency of marble. Michael Angelo received for the above work 400 crowns. There are those who say, that neither ancient nor modern times can boast such a colossal statue as this; not even Monte Cavallo.

For Angelo Doni, a Florentine, Michael Angelo painted a round picture, representing the Madonna kneeling, with the infant in her arms, presenting it to St. Joseph; in the distance are many naked figures, some reclining, some standing, and some sitting. This is a finished work, highly coloured, and is now in good preservation in the gallery at Florence. When Michael Angelo sent this picture to his friend Doni, he also sent a letter, demanding for his work seventy ducats. Doni thought the sum too much, and only sent forty. Michael Angelo immediately returned the money, with a message that he would either have 100 ducats or the picture. Doni, who was enchanted with it, sent the first seventy, which Michael Angelo returned, intimating that now he would have 140 ducats, which Doni was obliged to pay. For the honour of Michael Angelo, it is to be wished that this story is untrue.

When Leonardo da Vinci was painting the great hall of Florence, the Gonfaloniere, Pietro Soderini, wished Michael Angelo to do a part of it also. Michael Angelo chose for his subject the War of Pisa, and introduced a number of

naked figures bathing in the Arno; when the alarm is sounded they hasten out of the water, arm themselves in confusion, and fight in the best manner they are able. Among them, an old man is endeavouring to put on his stockings, but his legs being wet he cannot draw them on: the muscles and nerves, from the head to the feet, evince the feeling that agitates him. This picture has served as a study to some of the most celebrated painters, Aristotile da San Gallo, Raffaello, Andrea del Sarto, Sansovino, Perin del Vaga, and many others. It was in a great hall of the Medici palace, but during the illness of the duke Giuliano was cut into a number of pieces, as Baccio Bandinelli says, and dispersed into various places as relics.

Michael Angelo, at this time nearly twenty-nine years of age, and renowned for so many great works, was sent for to Rome by Julius II., who wished to erect a superb mausoleum for himself. Michael Angelo made a design, which, for beauty, grandeur, and quantity of statues, surpassed every ancient monument. This mass, 34 feet long and 22 feet wide, was to be insulated, in order that it might be seen on all sides. It had within and without an order of niches, intermixed with termini, clothed from the middle upwards, supporting the first cornice on their heads; and each, in some strange and whimsical attitude, is holding a naked prisoner bound, whose feet rest on a projection of the basement. These latter figures represent the provinces subject to, or united with, the pontifical dominions. There were also a number of other statues, as the Virtues and ingenious Arts, under the dominion of Death, with the pontiff who had cherished them. Over the angles of the first cornice were four large statues, Active and Contemplative Life, St. Paul and Moses. As the work ascended, it diminished above the cornice, with an historical frieze of bronze, and other small figures, with

a variety of ornaments. At the top were two statues; one the Heavens, supporting a bier on the shoulders, and smiling, because the soul of the pope had entered into glory; the other Cybele, goddess of the earth, also supporting the bier, but grieving at the loss of so great a pontiff. The entrance was at one extremity, in the centre of the niches; and the interior, where there was space to move with great ease, was in the form of an oval temple; in the centre of which was to be placed the sarcophagus, containing the body of the pope. This mausoleum contained forty statues of marble, besides the smaller ones, the sculptured bronze, and the ornaments. It is a vulgar error, and destitute of any probability, that in order to receive this wonderful sepulchre, pope Julius formed the idea of the new St. Peter's. It is true that great things are often derived from smaller ones, but in this instance it was otherwise. Michael Angelo immediately made preparations for this great work; he went himself to Carrara to choose the marbles, which, when they arrived at Rome, filled half the square of St. Peter's. He erected his workshop between Castello and the Vatican, with a draw-bridge to the gallery, for the convenience of the pope, who frequently went to see him work. He sent some marble to Florence, intending to work there during the summer, to avoid the extreme heat of Rome. For this sepulchre, which he never finished, Michael Angelo made two slaves, and afterwards presented them to Strozzi, in gratitude for his attention to him during a long illness, which he had at the Strozzi palace. They are now at Paris, in the house of Richelieu; one is almost complete, the other but roughly sketched: they are both larger than life, and in a most masterly style. One Victory is finished, and now in the Old Palace at Florence, but the captive under the right knee is only sketched out. The Moses is finished, and now in San Pietro in Vincola;

it is most beautiful, but would be seen to more advantage if placed higher and insulated, as it was intended to have been.

While Michael Angelo was thus employed, the rest of the marbles arrived from Carrara, to pay for which he went to the pope, but finding him occupied on other affairs, he defrayed the expense himself, thinking he should soon be reimbursed. He returned another day to speak to the pope on the subject, but a groom denied him entrance. Indignant at this conduct, he gave vent to a violence of feeling, from which even great men are not exempt, and said to the groom, "When his holiness calls for me, tell him I am gone elsewhere." He ordered his servants to sell his clothes to the Jews, took post immediately, and fled to Tuscany. When arrived at Poggibonzi, on the Florentine frontier, he was overtaken by five couriers, with most pressing letters from the pope, desiring him to return immediately to Rome. He was with great difficulty persuaded to give any answer: at length yielding to the entreaties of the couriers, he returned one, but it was a decided negative. Other motives have been attributed to this flight of Buonarroti; some ascribing it to the fear of the pope's resentment for having thrown down a plank from the scaffold, when painting the Sistine chapel, at the moment the pontiff had gone in secretly to look at him. Be this as it may, on his arrival at Florence three pontifical edicts were directed to that republic, extremely honourable to him; but rather than return to Rome, he resolved to go to Constantinople, where, through some Franciscan friars, he had been invited by the grand signior to build a bridge from Constantinople to Pera. However, the Gonfaloniere, Soderini, induced him to attend to the commands of the pope. He spoke to him thus:—"You have tried the pope in a way that the king of France would not have done, and it is now no longer time to be entreated. We cannot make war on him, and put the state in danger.

Prepare then to return, and if you are afraid, the signiory send you with the title of their ambassador: thus you will be safe."

Michael Angelo departed, and was recommended by the Gonfaloniere to cardinal Soderini, his brother, who was to introduce him to the pope, then at Bologna. On his arrival there, he was surrounded by the domestics, each of whom was anxious for the honour of accompanying him to the pontiff. The cardinal Soderini, who was then indisposed, sent a bishop, a friend of his, to him. Michael Angelo threw himself at the feet of his holiness, who said, in a grave tone, "Instead of your coming to seek us, we are obliged to seek you;"—meaning that Florence was nearer to Bologna than Rome. Michael Angelo, more by gestures than by words, made his excuses and asked pardon. The bishop, who introduced him, said, in order to soften the pope, "That such men were ignorant, and out of their professions were generally coarse and uncourteous." On this the pope flew into a passion with the bishop, exclaiming, "It is you that are ignorant for so libelling him: go to the devil with you;" and some say that he would have beaten him. Being at length calmed, he blessed Michael Angelo, and ordered him to make his statue in bronze, which, when finished, was placed in the façade of the church of San Petronio, amid the ringing of all the bells at Bologna, and other demonstrations of joy: it had so threatening an aspect, that the pope asked whether it was giving the blessing or the curse. Michael Angelo answered, that it was admonishing the people of Bologna to be more obedient for the future. The sculptor asked the pope, if he might put a book in the left hand: "No!" was the reply; "I know nothing of letters, rather put a sword." It is true that he always carried one. This statue was destroyed by the partisans of the Bentivogli faction, in 1511, and the duke of Ferrara made a piece of artillery of the bronze, and called

it Julius. He saved only the head, which he would not have parted with for its weight in gold, though equal to 600 pounds. We do not know in whose possession it now is.

The pope returned to Rome, leaving Michael Angelo at Bologna to finish the above-named work. At this time Bramante took the opportunity of withdrawing the favour of the pope from him, by endeavouring to persuade his holiness that erecting his tomb was a bad omen, and anticipating his death; that it would be better to desist from it, and employ Michael Angelo in painting the Sistine chapel, in memory of Sixtus IV., his uncle. Bramante thought that Michael Angelo, unaccustomed to the use of the pencil, would not succeed, and consequently lose the favour of the pope. In fact, on the arrival of Michael Angelo at Rome, he was ordered to undertake the work; he at first refused, but was at length obliged to submit. Bramante was commanded to make the scaffold for the painter, and supported it by cords fastened to the roof. When Michael Angelo saw it, he asked how the holes, made by the cords, were to be covered when the scaffold was removed. Bramante replied, that he would think of that hereafter, but that he could not do it in any other way. Michael Angelo then discovered that Bramante was either unacquainted with mechanics, or not his friend. He therefore went to the pope, and in the presence of Bramante himself, said that the scaffold was not properly erected. The pope allowed him to erect one in his own way, which he did without injuring the walls, and with so much ingenuity, that it served as a model for Bramante himself in building St. Peter's. Michael Angelo designed the cartoons of the paintings on the roof, and by the decision of Giuliano Sangallo, received 15,000 ducats for them.

Michael Angelo sent to Florence for some of the best painters to assist him, and teach him the manner of painting in fresco; but on trying their skill he was so dissatis-

fied, that he put out all their work, sent them away, and shut himself up in the chapel, determined that no one should enter it, nor would he, during the whole of the time he was engaged, see any one even in his own house ; but in proportion as he concealed himself, was the curiosity of the public excited. The pope especially was so anxious, that he went in one day, on which occasion, as it is said, happened the fall of the board, and the flight of Michael Angelo. When the third of his labours was completed, he discovered that in places exposed to the north, the painting had become mouldy. Overwhelmed with vexation, he determined to relinquish it, but Giuliano Sangallo explained to him that the defect proceeded from the peculiarity of the Roman cement, which did not dry quickly, and that, while wet, the salt would exude, but, when perfectly dry, the mould would no longer be visible. Thus encouraged, Michael Angelo continued the work, and when the half was finished, the pope insisted on seeing it ; and, although the chapel was filled with dust from the removal of the scaffolding, he was the first to enter : thither he was followed by all Rome, and all were equally astonished. Raffaello thanked God for living in the time of Michael Angelo, from whom he had learnt more than from his father, or his master Perugino. Bramante, being inclined to favour his countryman and relation, was desirous that Raffaello should finish the other half of the chapel. At this Michael Angelo was perfectly furious, and pointed out to the pope many defects in Bramante, not only with regard to his architecture, but in his moral conduct. The pope, who loved and esteemed Michael Angelo, would not allow him to be so unjustly used.

While Michael Angelo pursued the work, the pope inquired of him many times when he should have it finished. He answered, at length, When he should have satisfied himself on the subject of the arts. But perceiving that

this answer displeased the pope, he soon removed the scaffold ; and on the morning of All Saints, the pontiff, to his great delight, performed the service in the chapel to an immense concourse of people. Michael Angelo wished to have retouched and embellished some parts, but was prevented on account of having to re-erect the scaffold. Who could suppose that such a stupendous work was finished in twenty months ; particularly as Michael Angelo did every thing by himself, even to the preparing the ground for painting on, grinding the colours, and making every necessary tool. This was his custom also in sculpture, always making his instruments himself. It is said that the pope observed, that the painting appeared to him rather poor in colouring and gold ; when Michael Angelo answered, that the men of the other world were not rich, and even contemned riches.

From working for such a length of time with his head upwards, Michael Angelo contracted such a defect in his sight, that, for many months, he could neither see nor read unless in that position ; and whoever wishes to look at it attentively must feel the same inconvenience. It has consequently neither been studied nor copied. The smoke of the torches and candles blackens the colouring. It would be better to paint on perpendicular walls, and leave the vaulting and soffite merely to represent the heavens, in which might be seen clouds, stars, the moon, the sun, or birds, but never men, quadrupeds, fish, or plants ; and although angels, saints, and fabulous deities, are rightly placed there, still the inconvenience of looking at them should be a sufficient motive for abolishing the practice.

The painting of the Sistine roof, according to the judgment of some, is the noon-day of the arts, dissipating the darkness which had so long encircled the horizon of the art.

Whether we consider the beauty of the figures, the

rotundity of the outline, or the graceful and easy proportions, we are equally delighted.

The naked figures, in which the perfection of the art is discovered, are of various ages, countenances, and attitudes. Some support festoons of oak leaves and acorns; the arms of Julius II., denoting his to have been the golden age. The compartments have six corbels on each side, and one in the centre of each extremity. In these corbels are sybils and prophets, 11 feet high; in the spaces between them are the generations of Jesus Christ, and in the centre of the cieling is the creation of the world to the deluge, and the intoxication of Noah. But superior to all is the figure of Adam, half on one surface and half on another; but in consequence of the perspective, it appears to be painted on the same plane. It is a profile, one arm of the cross is inwards, one outwards, and it looks detached from the wall. This is the more to be admired, as there were not then so many rules of perspective. There are also many females, habited in various and whimsical costumes, which sufficiently shew that Buonarroti knew how to arrange the draperies with grace and elegance, although he had a greater proportion of naked figures, evincing the superiority of his drawing, and his perfect knowledge of the play of the muscles.

The universal applause that Michael Angelo acquired by this work made him more esteemed by the pope, who loaded him with rewards and honours; however he could not obtain permission to go to Florence, to erect San Giovanni, being obliged to resume his work at the mausoleum. Julius II. died, and to him succeeded Leo X., a great lover of the fine arts; and Michael Angelo, much to his dissatisfaction, was under the necessity of leaving the last-mentioned work to go to Florence, by order of the pontiff, to erect the façade of San Lorenzo. The most celebrated artists were competitors for this undertaking — Baccio d'Agnolo, Antonio Sangallo, Andrea and Jacopo Sansovino,

and Raphael; the design of Michael Angelo was preferred. He also made a model, which is preserved in the Medicean library. He went to Carrara to select the marble, but the pope hearing that there was some equally good to be found in Tuscany, Buonarroti went thither to open a quarry, and there consumed a number of years: consequently the foundations only were laid, and the façade remained to be executed.

When Michael Angelo devoted himself to architecture, he was about forty years of age; nor had he any other masters in this profession than his own natural talents, and the knowledge which had enabled him to become a painter and sculptor, united to the observations he had made on the buildings of antiquity. One of his first works was the Medicean library at Florence, with niches of a novel invention, and a convenient staircase, with singular divisions to the steps, differing from the common practice. He also built the second sacristy of San Lorenzo, one of his most beautiful works. Its form is square, with two orders of Corinthian pilasters; over the cornice of the second order in the centre of the four arches are four large windows, wider at top than at bottom. The roof is richly adorned, as is every other part of the chapel. While at Florence, he sent Pietro Urbino of Pistoja, his servant, to Rome, to fix the naked Christ, which holds the cross, in the church of the Minerva, at the foot of the great altar.

When Rome was sacked, and the Medici banished from Florence, Buonarroti was declared commissary-general of all the Florentine fortifications. He went to view those of Ferrara, and was received with extreme courtesy by the duke Alphonso I. d' Este. The military works which he executed at Florence and San Miniato, have excited the attention of the celebrated M. Vauban, who has given plans and admeasurements of them.

While thus employed, Michael Angelo sculptured seven statues for the chapel of San Lorenzo; and although not

finished, they are wonderful; that of Night Sleeping is particularly beautiful, on which some elegant verses were written.

When Florence was besieged in 1529, Michael Angelo, finding himself in danger, fled, and retired unknown to Venice, with two domestics, and 12,000 gold florins concealed in his doublet. In passing through Ferrara, he was discovered by the duke, who entreated him to remain there; but he determined to proceed to Venice, where all were anxious to know him. It is said that the doge, Andrea Gritti, requested him to make a design for the Rialto. In 1588, that is, twenty-four years after the death of Buonarroti, this bridge was erected by one Jacopo.

Michael Angelo was entreated to return to Florence, which he did, and defended the Campanile of San Miniato against the enemy's artillery, by covering it with bags of wool and mattresses suspended by cords.

From motives of gratitude, he painted the Leda for the duke of Ferrara. It is in water colours; Leda is embracing the swan, and Castor and Pollux proceeding from the egg. This picture was taken to France; it remained at Fontainebleau till the end of the reign of Louis XIII., when a minister of state, from scrupulous feeling, had it cut in pieces. It was, however, put together again in 1740, and in this miserable wreck the learned could scarcely trace the hand of Michael Angelo, who had much improved his colouring, after seeing the works of Titian.

The famous Venus, in fresco, in the Barberini palace, to which Carlo Maratta added some figures of children, is thought to have been by Michael Angelo; but tradition affirms it to be an ancient picture found in the baths of Sallust.

Pope Clement VII., although displeased with Buonarroti for having fortified Florence against the Medici, besides other misdemeanours which calumny imputed to him, desired him to paint, on that side of the Sistine

chapel in which is the door, the Fall of Lucifer, and on the other the General Judgment. The former was not executed; but a Sicilian painter attempted it, from his various designs, in the church della Trinita de' Monti. Although but badly done, there is a certain effect of the terrible, and a variety of naked figures falling from heaven to the centre of the earth, changed into strange and frightful forms of devils; however, there is some merit in the work.

The mausoleum of Julius II. occupied the mind of Michael Angelo: the duke d'Urbino was also extremely anxious for its completion; and, when Clement VII. died, Michael Angelo, being then fifty-nine years of age, hoped to have had the remainder of his leisure to finish it: but Paul III., delighted with the talent of this great man, invited him, by promises and caresses, to enter his service. Michael Angelo excused himself, by alleging his obligation to continue the undertaking, for which he had, at various times, received many thousand crowns. He at first thought of leaving Rome, but, after mature deliberation, yielded to the solicitations of the pope, who had been thirty years endeavouring to get him into his service. His holiness went with the cardinals to the house of Buonarroti, and was perfectly astonished on seeing the designs and statues for the sepulchre. The cardinal of Mantua said that the Moses alone was sufficient to honour Pope Julius. It was finally agreed between the pope and the duke d'Urbino, that the sepulchre should be lessened, which it accordingly was, and then placed against the wall in San Pietro in Vincola, as we now see it. The famous statue of Moses, that of Leah, with a glass in her hand, representing active life, and another of Rachel, symbolical of contemplative life, are all from the hand of Michael Angelo. It is easy to perceive that this sepulchre was put up in haste, and with little care. The architecture is trifling, and the statue of Moses is

placed in so confined a situation, that it is not possible to see it properly.

Michael Angelo now commenced his famous picture of the Judgment, which he finished during the pontificate of Paul III. This work is considered superior to any either executed by him, or by any other artist, however high his rank. Being thus exalted above all other pictures, it consequently received an equal proportion of criticism. By some it was objected, that there were too many naked figures for a place so sacred; but it would be difficult to clothe those who were about to become inhabitants of an immaterial world. One nobleman observed to the pope, that these figures were more fit for a bath, than for so venerable a place. It is said that the painter revenged himself by drawing the portrait of the critic in the character of Minos, among the devils, with a large serpent's tail encircling his waist. The nobleman recognising the portrait, went, extremely incensed, to the pope, who told him, that if he had been put in purgatory there might have been some remedy, but in hell there was no redemption.

Paul IV., scandalised at this "*Stufa d' Ignudi*," as he was accustomed to call it, had some of the figures covered with a drapery, painted by Daniel di Volterra, and therefore called it *Braghettone*; which produced some very severe jests from Michael Angelo.

The other exception made to this picture is the mixture of the sacred and profane, of Christianity with paganism: but this was a defect of the age, common to all the poets and orators, and by no means confined to painters. And after all, the only figures really objectionable are those of Minos and Charon; an idea which Michael Angelo took from Dante, for whose writings he had the greatest admiration. How worthy of a monarch's library would that volume be, on the margins of which he drew with a pen all the subjects it contained! This book was a prey to the waves: it came into the possession of the great

sculptor Montauti, who sent it, with many other valuables, from Tuscany to Rome: unfortunately the vessel was wrecked, and every thing lost.

Salvatore Rosa also censured Michael Angelo for his *Universal Judgment*, in a few severe lines; but he undoubtedly excelled all his competitors in his manner of expressing the different passions and affections of the soul.

While employed on this painting, he fell from the scaffold and injured his leg, which he would not attend to, thinking that physicians, instead of curing such accidents, generally cause lameness or death. But, at length, a particular friend undertook to cure him, and did so. We may say with Dante, of this great work,

Morti li morti, e i vivi parian vivi.

For the greater punishment of the damned, the instruments of the passions are carried by different naked figures. Christ is in the act of hastening forward, with an awful and tremendous countenance, to pronounce the curse, while there is an expression of fear on the countenance of the Madonna, who, encircled by a drapery, surveys the general ruin. An infinite number of figures, apostles, and prophets, surround the judge; the most conspicuous are Adam, the original cause of the scene, and Peter, the foundation "rock" of the Christian religion; underneath is an immense assemblage of saints and elect souls, who are rejoicing. Under the feet of Christ are the seven angels of the Apocalypse, with their trumpets sounding the fatal sentence: their appearance is terrible. Two of them support the book of life.

The seven mortal sins are fighting, under the form of devils, and endeavouring to draw down to hell the souls who are ascending, in most wonderful attitudes. Charon, with his oar, is beating in despair those about to leave his boat. In the attitude of the damned, the ter-

rors of eternal punishment are finely expressed. The several passions are also evident, as the luxurious, the avaricious, the proud, the envious. Buonarroti was eight years engaged on this tremendous work ; but it is painted so equally, that it appears to have been done in a day. It was exhibited on Christmas day, 1541. The learned and the ignorant were equally astonished.

The pope now wanted Michael Angelo to paint the Pauline chapel, in which was to be represented on one side the Conversion of St. Paul, and on the other the Crucifixion of St. Peter. These two immense pictures are now almost obliterated, though they are worthy of being preserved, as the last efforts of this great man's pencil. He was then seventy-five years of age ; a period of life certainly not calculated for painting, more particularly in fresco. The pope wishing to fortify Borgo, in a congress held on this subject, a violent contest arose between Antonio Sangallo and Michael Angelo. Sangallo said that his antagonist was great as a painter and sculptor, but was comparatively ignorant of fortifications. Michael Angelo replied, that to this subject he had devoted much attention, and the experience he had in fortifying San Miniato, had enabled him rather to surpass Sangallo ; and in the presence of all, he pointed out many errors that Sangallo had committed.

How injurious to these great men are such altercations ! Michael Angelo was deputed to make designs for the work : they were accepted and executed.

His active disposition would not allow him to remain in idleness ; and being no longer able to paint, he commenced sculpturing four figures, saying that the use of the mallet kept him in health. The subject was, Christ taken from the cross, supported by the Madonna, assisted by Nicodemus and one of the Mary's. He intended this group to have decorated his sepulchre, at the foot of the

altar, where he wished to be interred: excepting the Christ, the subject was unfinished.

Antonio Sangallo died 1546, and the pope declared Michael Angelo architect of St. Peter's. He refused this charge for some time, alleging that architecture was not his profession. The pope, however, prevailed, and he was placed in the situation, with uncontrollable power to build and pull down at his pleasure.

Michael Angelo, in gratitude for the confidence reposed in him, declared that he would attend to the building for the love of God without any reward whatever. This declaration was not, like many others, made in the spirit of vain-glory; for, when the pope afterwards wished to remunerate him, he would not accept of any thing. His first step was to disapprove the design of Sangallo, not only on account of the defects referred to in his life, but to save fifty years of time, and at least 300,000 scudi.

He thought by this means to conduct the building with more majesty, grandeur, and facility. In fifteen days he made the model, which cost twenty-five scudi, while that of Sangallo was more than 4,000, and had taken many years to complete. It probably appeared to Buonarroti, that all hitherto done to this edifice had been from motives of pecuniary aggrandisement. His generous nature could not endure such meanness; and previous to accepting the office of architect, he publicly declared to all the workmen, that if they received any extra remuneration without his direction, he would discharge them. He was consequently disliked and defamed.

After these preliminaries, he strengthened the four great piers which supported the cupola. Bramante had constructed them extremely weak: the other architects had with great boldness endeavoured to remedy this, but then they did not appear sufficiently solid for the design. He left two large spaces in the thickness of the great wall, for a winding staircase, sufficiently wide to admit the

laden asses from the top to the bottom of the arches. To the large piers are also left chasms, like wells—probably intended to be filled up; these were as large, it is said, as the church belonging to the convent of the *Padri Trinità*, at the Four Fountains. Above the arches is the grand cornice of travertine, differing from the usual custom, in having a less projection, and some members omitted; but it is useless, like all other cornices in the interior of edifices.

Michael Angelo fell into a worse error, which was that of giving too great a projection to the impost of the arches, which stood out before the pilasters. This has an exceedingly bad effect, particularly when looking at the profile of the impost. He began the two extreme curves of the cross, in each of which all the architects before him had designed eight tabernacles or altars. He reduced them to three, with a travertine vault above, divided into a number of elegant and well proportioned forms, with well arranged cornices, also of travertine. If these had remained plain and unadorned, as Michael Angelo intended, they would have delighted all who understood the subject; but now, being full of bas-reliefs and stuccoes, mixed with gold, can only please those who prefer the gaudy to grandeur and simplicity.

At this time the senate, with the approbation of Paul III., resolved to reduce the Campidoglio into a beautiful, useful, and commodious form. Michael Angelo was entrusted with it, and made an elegant and rich design. He began from the palace in the centre, destined for the senators of Rome. The external flights of steps, in two divisions, by which the ascent is to a landing midway, was made under his direction. Opposite the staircase, on a basement, were placed two antique gigantic marble statues, the Nile and the Tiber; and in the centre, within a niche, was to have been a Jupiter, instead of which a small porphyry figure of Rome was placed.

Michael Angelo did nothing more to this palace; we shall hereafter see by whom it was finished. The other, called that of the Conservatori, and which forms one of the wings of the Campidoglio, was entirely designed by Buonarroti; the ground floor, consisting of two porticoes, an interior and exterior, supported by sixty-eight columns of travertine, of one piece, in the Ionic order, with a beautiful capital, the invention of which is generally attributed to Michael Angelo. The great fault is, that in order to give a width proportioned to the portico, he adopted the unfortunate expedient of sinking the columns in the thickness of the walls. The soffites of the portico are very beautiful; but some which have been ornamented with grotesque stuccoes, have a confused and laboured effect. That of not having placed either frieze or cornice within the porticoes, is a taste certainly to be commended. The doors in the exterior portico are in a good style, but the principal one at the entrance, as well as that of the interior, is bad. The staircase is magnificent, though not sufficiently light, the vault is plain, and the landings richly adorned,—which has a discordant effect. In the external decorations, good sense is certainly offended. On pedestals, a third of the height of the Ionic columns, between which they stand, are erected Corinthian pilasters, which cut the Ionic entablature, and support the mass of the edifice. Although the upper entablature has dentils and modillions, it is continued without a break, and has, therefore, a grand effect; but the inferior entablature remains useless. The windows are too small, and badly ornamented; the capitals of the small columns, which flank them, are so disfigured in their profiles, that it is impossible to decide to what order they belong. The awkward centre window was designed by Giacomo del Duca.

In this building there appears a mixture of good and bad taste, which may have arisen from the architect

being also a painter. It is possible, also, that the defects do not belong to him, as he left the constructing of the work to Giacomo del Porta, to whom succeeded others; and it is well known that all are inclined to make changes. The three palaces of the Campidoglio are crowned with balustrades and statues above. This is manifestly against common sense, though continually practised.

On the declivity of the Campidoglio, near the city, Michael Angelo designed a low wall, or terrace, forming a square, finished at the top by a parapet of balustrades, adorned with statues and beautiful antique ornaments. In the midst of this square is the celebrated equestrian statue of Marcus Aurelius, which Sixtus IV. had placed in the church of San Giovanni Laterano; Michael Angelo made the pedestal of marble, simple, and beautifully proportioned. The architecture of the modern Campidoglio is elegant, but it is small and insignificant, when compared with the glory of the ancient capital. Modern Rome has centred all her magnificence in the Vatican. We must remark, that the two lateral palaces of the Campidoglio are not parallel, but incline towards the centre palace: their inclination is as 4 to 3. The reverse should have been the case. Had they inclined towards the square, the façades would have been shewn in a better point of view.

The Farnesi palace, the work of Sangallo, wanted, as we have already observed, a cornice; for this Michael Angelo made a wooden model 11 feet high, and had it placed on one of the angles, to see the effect; a practice observed in the earliest times, and one which it would be well always to adopt, when there are no certain rules of optics. The model gave general satisfaction; but, although very beautiful, it is not equal to that copied from an antique by Il Cronica, and erected in the Strozzi palace at Florence. It is, however, the best proportioned and most

majestic in Rome; but the modillions should not have been carved. The lilies might have been less frequent, and the lions' heads, for conducting the water, would have been better omitted; less ornament, and more boldness, would have better suited the imposing and serious air of the palace. It is said that the large window in the centre of the façade was designed by Michael Angelo: be it by whom it may, the effect is bad. The small and beautiful columns are mixed and improperly placed; the opening is too wide, and the number of pilasters causes great confusion. The first story of the court is a regular Doric, but the columns attached to the piers which support the arches are injured by the cornice of the imposts projecting too much. The second story is a well arranged Ionic. The third, which is Corinthian, looks trifling, and has too many projections in the angles. In this court are three entablatures, although there should only have been one to crown the whole edifice.

During the building of this palace, there was found, in the baths of Antoninus, the famous Farnese bull; the largest group, of one entire mass, ever known, being 13 feet high and 10 feet wide, comprehending five statues, three of which are larger than life, viz. the formidable bull, a dog, and a serpent. To the bull is bound Dirce, for love of whom Lycus, king of Thebes, repudiated and imprisoned his wife Antiopa, mother of the two ferocious youths, Zethus and Amphion, who, on the death of their father, revenged themselves on Dirce in this barbarous manner. This group, according to the common opinion, was sculptured in Rhodes by Apollonius and Tauriscus, two celebrated statuarics, but it is not equal to the best productions of Greece. It was formerly in the house of Asinio Pollione, and is now in a kind of workshop at the back of the Farnesi palace, where it was placed by Michael Angelo, who intended to have made a second court, and used the group for a fountain. Opposite to

the Strada Giulia was to have been a bridge over the Tiber, to enter the palace; whence, by a direct road across the Campo di Fiore, a coup-d'œil would be obtained of the Farnese façade; the first court, the fountain with the bull in the second court, the Strada Giulia, the bridge, a garden, the Farnesina, and the Strada Lungara: an idea worthy of Paul III. and Buonarroti. At this time also was discovered the Farnese Hercules, but without legs. They were replaced by the Brother Guglielmo della Porta, an excellent Milanese statuery, after a model by Michael Angelo; and were so well executed, that when the originals were at length found, Michael Angelo was of opinion that the former should remain, and the latter be placed in the villa Pinceana, although certainly far superior in execution to the modern.

To Paul III. succeeded, in 1549, Julius III., who was much attached to Michael Angelo, and continued the advantages conferred on him by his predecessor. But the Sangallesian faction still insisted that Michael Angelo had spoiled St. Peter's, and left the church without sufficient light. The affair became at last of such importance, that at a grand convocation the pope observed, that the deputies (the cardinals Giovanni Salviati and Cervino, afterwards Marcellus II.) considered the cross transept too dark. Michael Angelo replied, that under the travertine vault, which still remained to be done, were to be three other windows; and gave so clear an account of every thing, that the assembly retired perfectly satisfied.

The pope encouraged Michael Angelo to do his duty, and frequently invited him, in company with Vasari, to visit his vineyard, without the Porta del Popolo. Going thither one day, when the pope and twelve cardinals were standing round the fountain, he made Michael Angelo sit down by his side. This pope was desirous of building a palace at the side of San Rocco, and to use the materials of the mausoleum of Augustus for some of the walls.

Buonarroti made a design for it, at once varied, ornamental, and whimsical. If this design be not in the Medicean gallery, it is most probably lost.

The pope not only protected Michael Angelo in his disputes with the cardinals, and against those who calumniated him, but even wished the best artists to go to his house, and consult him as an oracle. So great a man merited certainly both deference and respect, especially after the circumstance relating to the ancient bridge of Santa Maria. After Buonarroti had taken immense trouble to strengthen the foundation, Nanni di Baccio Bigio persuaded the clerks of the chamber that he would finish it in a less space of time and at a less expense; and assured pope Paul III., that Michael Angelo, not being enabled to superintend it on account of his great age, willingly left it to him. By these arts, and without the knowledge of Michael Angelo, Nanni commenced the bridge, and finished it in a short time. In five years, that is, at the close of 1551, it no longer remained. Michael Angelo had predicted its fall, and whenever he passed over it ran with rapidity, saying, it appeared to shake under him.

During the pontificate of Paul IV. Michael Angelo was deprived of the office of chancellor of Rimini, which he had enjoyed for some time, but such was his disinterestedness, that he never would mention it to the pope; and having also lost that of St. Peter's by the same artifices that had deprived him of the former, he was assigned as a recompense 100 scudi a month; but when the first hundred was brought him, he refused to accept them, and persisted in remaining silent.

The leisure moments of Michael Angelo were employed on the marble intended for his sepulchre, but it caused him much vexation, finding it full of blemishes; and not succeeding to his mind, he broke it up. Feeling himself, however, lost without his chisel in his hand, he com-

menced a smaller Pietà, in which the Christ is finished. It is now behind the high altar of the cathedral at Florence. In his youth, Michael Angelo finished his sculptures, but in advanced life, when better acquainted with the arts, he became less satisfied with his own works. On discovering the least error, he would put aside the marble, and commence another.

Michael Angelo, now eighty-one years of age, was extremely desirous of finishing his days at Florence; whither he had been so often invited by the duke Cosmo, and so earnestly by Vasari; but he was prevented, not so much from his years, as from the interest he took in the building of St. Peter's, which underwent continual alterations under his eye, through the inexperience of the workmen and the malignity of persons interested in protracting the work. Among the architects of St. Peter's, was the Signor Don Pirro Ligorio, a Neapolitan nobleman of Porta-Nuova. He treated Michael Angelo as in his second childhood, and wished, in consequence, to alter the order of the building. Paul IV. could not endure such presumption, and consequently deprived him of the charge. Buonarroti was a rock, against which beat the storm of envy, calumny, and the malice of all those who expected to derive some benefit from the fabric. The edifice was already completed as far as the beautiful drum of travertine on which was to be placed the cupola. All the friends of Michael Angelo, and especially the cardinal di Carpi, induced him, notwithstanding his years, and in consequence of the lowness and want of talent in others, to make a model for the cupola. He at length completed a small one in clay, from which was formed one of wood, after much labour and study on the part of Buonarroti, by Maestro Giovanni Farnese. This model was admired by all, and at length executed under Sixtus V. The intrigues and artifices, however, woven against Michael Angelo, during the erection of this building, are

almost without number. Nanni Bigio was made his substitute, without his knowing any thing of the circumstance. It was this same Nanni who spoiled the bridge of Santa Maria and the gate of Ancona: he also built the Salviati palace at Lungara, and the Ricci in the Strada Giulia. Michael Angelo related every thing openly to pope Pius IV., who rendered him justice, and ordered the superintendents not to deviate in the slightest degree from the design of Buonarroti. Pius V. renewed the same order, and insisted on its being attended to. Had this been acted upon, we should not now have to regret so many defects in the greatest temple in the world.

Michael Angelo made three designs, all equally whimsical, for the Porta Numentana, which Pius IV. wished to erect, and which consequently received the name of Porta Pia. The least expensive one was chosen and nearly executed, but, after a space of 200 years, is not yet complete. This gate has no architectural regularity, but is of an extravagant composition. Of the other designs which he made for the gates of Rome, it is not known that any were executed. All his erections of this kind were irregular; that at the Vigna del Patriarca Grimani partakes of every species of architecture. The order is Doric, the termination Ionic, the ornaments of the columns Gothic, the mouldings all Corinthian. His profiles were never the same, sometimes sharp and whimsical, sometimes regular, as in the great Farnesi entablature, and that of the Campidoglio.

Though now quite infirm, he gave five designs to Tiberio Calcagni, a Florentine sculptor, for the church of San Giovanni of the Florentines, and left the choice to the deputies' commissioners; they determined on the richest. He then said, that, if closely attended to, they would have, when completed, a temple far surpassing in beauty any thing imagined by the Greeks or Romans. So egotistical a remark never before proceeded from his

modest lips. A model of this design was made in wood, and preserved till latter times; but when under Clement XII. the façade was to have been erected, it could not be found. It is possible that the priests, who had the care of it, might have burnt it. Clement XII. thought to have used it for San Lorenzo of Florence, where it was not executed; and it was extremely well adapted for San Giovanni of the Florentines, but the architect Galileo dissuaded him from it, saying, that the design was too antique, and differed too much from the modern style. To our disgrace, his observation was too true. This was a proof of it.

The design of Michael Angelo for the church della Certosa, in the midst of the baths of Dioclesian, was preferred to those of many architects; it was executed, and gained universal admiration. "Latterly," says a great man, in his *Dialogues on the Three Arts of Design*, printed at Lucca in 1754, and in the *Life of Michael Angelo* by Vasari, printed so many times at Rome, and the last in 1760, "This church has been entirely changed from the design of Michael Angelo. The principal door has been walled up; it was magnificent, entirely of travertine; and where stood the gate is now a chapel and an altar, by Beato Niccolo Albergati. Four large niches were walled up, which led into ancient and majestic interiors, left by Buonarroti for chapels. The transept is now made the principal body of the church; and the nave, which should always be, and was the most conspicuous part, is reduced to a mere accessory one. Finally, instead of that superb door which architects were never weary of admiring, the entrance is now by a side porch, placed in an ugly contemptible concave façade, with the necessity of descending not less than ten steps, as if going into a grotto: an idea differing from that of Buonarroti, with many other incidents equally monstrous, was reserved for that age, to be a perpetual monument of the degradation to

which architecture has arrived, and of the taste belonging to those who undertake great buildings.

It is somewhat curious, that the same degree of praise was lavished on the design of the modern architect as on that of Michael Angelo, which would lead us to imagine that the former was superior to the latter, and to all the architects of antiquity, or that a total change has taken place in the ideas of mankind, which is very possible to be the case.

It is not, however, just to attribute all these disgusting alterations to Signor Luigi Vanvitelli. It sometimes happens that a clever man cannot act according to his own principles. The merit of this artist was really great, as will be seen hereafter.

Guido Antonio Sforza, cardinal of Santa Fiore, caused Michael Angelo to erect the noble chapel of Santa Maria Maggiore, who gave the direction of it to Tiberio Calcagni. In consequence of his death it remained imperfect, but was completed, with some variation in the design, by Giacomo della Porta. It had a superb façade within the church, which was removed when Benedict XIV. remodelled the basilica. At the request of Michael Angelo, the same Tiberio completed a bust of Brutus, copied from an ancient cornelian belonging to the Signor Giuliano Cesarini. This bust is now in the gallery at Florence, having a metal label, on which is inscribed this distich, said to be by Bembo : —

Dum Bruti effigiem ducit de
Marmore sculptor
In mentem sceleris venit, et
abstinuit.

The Strozzi chapel at Florence was designed by Michael Angelo, as also the Sapienza of Rome, except, perhaps, that part where the church is situated. The Sapienza is a grand and magnificent edifice, well laid out, with elegant decorations to the doors and windows; but exteriorly the

windows are badly placed. The imposts of the arches in the court project too much before the pilasters : in the porches of the long sides there is a confusion in the capitals, the ornament of the windows, and the cornices of the doors ; the staircases are beautiful, but too formal.

For Tommaso de' Cavalieri, a Roman gentleman, from early youth attached to drawing, Michael Angelo drew a number of heads in crayons, a Ganymede carried off by the Eagle, a Prometheus devoured by a Vulture, the fate of Phæton, and many other subjects. These drawings are now dispersed. As Buonarroti was much beloved by the Marchesa of Pescara, who often went to Rome expressly to see him, he drew for her a dead Christ, resting on the knees of the Madonna. A number of copies have been taken of this piece, which have passed in the galleries for originals. He also drew a Crucifixion, said to be in the possession of the Borghese family, of which the story is told of Buonarroti nailing a man to the cross, to enable him to catch the expression.

Michael Angelo studied anatomy with great attention ; it is said that for twelve years he was in the habit of dissecting men and beasts, and particularly horses, in order to observe the formation and ligatures of the bones, the muscles, the nerves, their various movements and positions ; but, in consequence of so continually touching dead bodies, his stomach became so affected that he had no pleasure in taking food. He had at one time an idea of writing a treatise on anatomy, but from some cause relinquished it. This is to be regretted, for the sake of those who wishing to imitate him, and not possessing his profound knowledge, have fallen into absurdities, as he predicted. His maxim was, Those figures are good which are so artfully arranged that they appear natural : — “ *L' arte, che tutto fa, nulla ti scuopri.*”

He was industrious in all his pursuits ; he meditated deeply ; but frequently could not execute with his hands

the ideas generated in his mind: he then destroyed his works, burnt his drawings, and recommenced again. To draw Minerva from the head of Jove, he saw that the hammer of Vulcan was requisite. In fact, he laboured hard to acquire that union of the graces which was observable in every thing. He lived in solitude, if he can be called solitary who possessed so many sublime resources. To amuse his mind, he sometimes conversed with his friends, among whom were the first literary men of the time, cardinals Polo, Bembo, di Carpi, Maffeo, Ridolfi, Santa Croce, afterwards pope Marcello II., Annibal Caro, and others. He studied Dante and Petrarch, and also composed some poetry, which has been published. He also studied the Holy Scriptures, and read the works of Savonarola.

The pontiffs Julius II. Leo X. Clement VII. Paul III. Julius III. Paul IV. and Pius IV., under whom he lived, all loved and esteemed him. Among these Julius III. excelled in his admiration of this great man. This pope regretted that he never asked him any favour, when, had it been in his power, he would have given him years to have lengthened a life so valuable to the world. He was accustomed to say, that if Michael Angelo died first, he would have him embalmed, and be himself laid at his side. Thus was Michael Angelo to be converted into an oracle and a mummy. Great men should, indeed, live the years of the antediluvians.

The Medicean dukes yielded to none in their kindness and attention to Buonarroti. When Cosmo I., grand duke of Tuscany, went to Rome, he not only insisted on his being covered, but seated him between his knees, almost on them. Ottaviano de Medici solicited him to stand sponsor to his son; and the cardinal Ippolito having heard that Michael Angelo was pleased with a Turkish horse belonging to him, he immediately sent it, with ten mules laden with corn, and a groom to attend them. Francis I.

of France, desired his services, and ordered him to receive 3000 crowns immediately, to enable him to undertake the journey. The emperor Charles V. rose on seeing him, and exclaimed, "Emperors may be found, but never your equal." There are some who think good emperors more rare than good artists. It is said that Charles V. having asked him what he thought of Albert Durer, he replied promptly, "Were I not Michael Angelo, I would rather be Albert Durer than Charles V." The republic of Venice and the grand Turk were equally desirous of having him.

Buonarroti had a prodigious memory; he remembered every thing he had once seen; whence arises the variety of his figures. Requiring but little sleep, he rose in the night to work, and for this purpose he contrived a card dish, and in the centre a lighted candle. When old and decrepid, and in the midst of snow, he was one day met by the cardinal Farnese, near the Colosseum, who asked whither he was going at his age, and in such weather. Michael Angelo answered, That he was going to the school to study. To a priest, who reproved him for never having taken a wife, he replied, "My profession is my wife, and my works are my children, which, if they are good for any thing, will live for some time."

To these rare talents he united much prudence in speaking, sometimes enlivened by pleasing, acute, and just sallies. When he heard that Bandinelli boasted of having excelled the originals in his copy of the Laocoon of Belvidere, which copy is now in the gallery of Florence, Michael Angelo said, "He who gets behind another can never pass before; and he who does not think well of himself, can never make a good use of the works of others." A sentence which should be written in characters of gold on every gate and bench of the schools, be the science or art what it may, and which should be imprinted on the minds of all. This explains the phenomena of the decline of art: it is not the want of patrons, as the commonalty

pretend. How many great men have become so without the assistance of any one, and amidst many disadvantages! It is not the want of genius, Nature is always the same. The cause of the decline is the imitating the works of others: and thus by placing ourselves in the back-ground we continually remain so.

All the masculine moral virtues were united in Michael Angelo. He was a good Christian, destitute of resentment, modest, and patient. He was so temperate, that he frequently lived for whole days on a little bread and wine, that he might pay the greater attention to his work — like Protogenes, who lived on seeds while painting his great master-pieces. Disinterested in the extreme, he refused every species of reward; liberal with his own, he gave much to his friends. He knew the proper use of money, bestowed much on the poor, portioned several girls secretly, and provided well for an old servant named Urbino. “When I am dead, what will you do, my dear Urbino?” said he once to him. “I must serve another,” was the reply: Michael Angelo then gave him 2000 crowns. To his nephew, Leonardo Buonarroti, he frequently gave 3000 or 4000 crowns at a time, and at last left him 1000, besides what he had at Rome. He was attached to artists, among whom were Jacopo Sansovino, Il Rosso, Il Punturmo, Daniello da Volterra, and Vasari: but he was unfortunate with regard to his pupils, not meeting with one, during the course of so long a life, who had either talent or inclination to learn, although he paid the most affectionate attention to them.

Exempt from all vanity, he never drew his own portrait, nor had it drawn by any one, except by Tommaso Cavalieri, as he never found perfect proportion in any one.

He was of a middling stature, wide across the shoulders, but well-proportioned in every other part of his body; his face was round, with a fine expression. His complexion

healthy, although he was sickly in his youth, and in old age suffered from an internal complaint. He died at the age of 90; his father lived till 92. His will was comprised in three sentences:—"My soul to God, my body to the earth, and my estate to the nearest relation." These few words were, however, useless. The body was interred with the most solemn obsequies in Santi Apostoli; from whence the pope removed it to St. Peter's; but the grand duke, Cosimo I., by means of Leonardi Buonarroti, his nephew, had it secretly carried away to Florence. It had scarcely reached that place, when all the professors of painting met and conducted it to the church; and, though at night, the news spread so rapidly, that every window and street was filled with a concourse of people and lights. The church of San Lorenzo, which was reserved for the interment of monarchs only, received the corpse of Michael Angelo. The funeral rites were celebrated with a pomp and splendour surpassing all imagination. By permission of the grand duke, the best painters, statuaries, and architects, Vasari, Cellini, Ammanati, Bronzini, all rivalled each other in endeavouring to honour him with their several arts, whose merit had so much tended to promote them. The preparations in the church were superb; they merit a long description; the obsequies were deferred for many weeks, that not only the city, but all Tuscany, and strangers also, might have the opportunity of testifying their admiration of him. When the day arrived, every one relinquished their pursuits, and hastened to be present at the ceremony. The celebrated Benidetto Varchi pronounced an eloquent oration; and the poetic compositions were innumerable. He was finally buried in the church of Santa Croce, with his ancestors. The grand duke, besides the marbles, contributed money to erect a suitable monument to his memory, the design of which was by Vasari, and the statues by various artists: it consists of the bust of

Michael Angelo, and three statues symbolical of the three noble arts which he practised with so much success.

It is singular, that on opening the coffin twenty-five days after his death, the body, though not embalmed, was found perfect, without the least unpleasant smell, appearing like an old man in a calm sleep. It is still more extraordinary, that on opening the sepulchre forty years afterwards, perhaps to repair it, the senator Filippo Buonarroti and many others being present, the body was still perfect; and the sole of one of his slippers flew off to the distance of two braccia, from being so dry.

In Buonarroti, we have the singular phenomena of a man perfect in three professions. The fables of antiquity have united several Herculi to form one prodigy. But in Michael Angelo we have three great artists, a sculptor, a painter, an architect, and each excellent;—this triple excellence remains to the present moment unrivalled. Far, however, from regarding him as endued with divine powers, which some have done, we must think of him as a man, and, consequently, subject to error. With respect to statuary and painting, we leave his merits and defects to those who may treat on those subjects. We shall speak of him as an architect.

In the church of St. Peter, we see the architectural grandeur of Michael Angelo. He rejected, and with reason, the design of Sangallo; he formed the plan of a well-proportioned and elegant Greek cross, terminating three extremities semicircularly, and the other square, with ample wings in the flank of the great nave. One single order of majestic Corinthian pilasters, decorate both the interior and exterior of this grand temple. The order of the façade was to have been the same, and of the same height, as that within. It is now ornamented with eight large pilasters, having three doors in the centre, and four large niches. The interpilasters, in which were the doors, were wider than those which contained the

niches. Opposite to each pilaster a column was placed, forming a portico with seven intercolumniations in front. It is impossible to say whether these intercolumniations of various widths would have produced a good effect. The three centre intercolumniations were repeated, forming a double portico, the front terminated at the top by a pediment—we may also doubt if this would have looked well. The grand cupola had, as it were, the whole church for a base, on which it rose surrounded by the four smaller ones. The whole was on a grand, noble, beautiful, and majestic scale, and evinces the sublime talent of Buonarroti, exciting indignation towards those who have so disgracefully deformed it.

We now come to the detail of Michael Angelo's work in St. Peter's. We have already touched upon the defect in the impost of the arches exceeding the projections of the pilasters. The ornaments of the windows and niches, and the vaults of the superior niches above the necking of the pilasters, cannot certainly be admired; and how are we to endure those unsightly pediments over the large windows of the transept, whilst every pediment within must be considered useless? The attic, which surrounds the temple exteriorly, is too high; the windows badly formed, and the ornaments extremely heavy. This attic is so evidently irregular, that the advocates of Michael Angelo deny its being his. The drum of the cupola is superb, the figure of the latter excellent, and the mechanical part wonderful; but the lantern with those flambeaux is by no means agreeable: here, again, his admirers, as if paid by him to defend his works right or wrong, maintain that this also was not his design. The exterior basement of this great edifice is beautiful; but the numberless angles, with the pilasters, which make their appearance one under the other, are most insufferable.

The church of St. Peter, and the sacristy of San Lorenzo at Florence, are the finest works of Buonarroti;

and these, with every other, shew a genius in invention, sagacity in the arrangement, and a perfect knowledge of construction. But in his ornaments he took great liberties; he sometimes departed from all good rules, introduced a certain boldness, mixed with the whimsical, which were his peculiar characteristics in painting. He used to say that he knew little or nothing of architecture: this might merely be an expression of modesty. It is, however, certain that architecture was not his original profession. He still merits a distinguished rank among architects. If he had applied himself to discover its origin and rules, he would not have committed so many errors. His caprices have been a ladder for those of Borromini and the modern school. His famous saying, "We should have the compass in the eye," has been abused, and has made many architects sworn enemies to labour. It is impossible to have a knowledge of proportion without having had the compasses for some time in the hand; at the same time observing the best works, in order to form a just taste, and produce something valuable.

GIACOMO DEL DUCA, A SICILIAN.

HE studied architecture and sculpture under Buonarroti at Rome. Over the cupola of the Madonna de Loretto at Rome, said to be the work of Sangallo, del Duca erected an insufferable lantern, and built the ill-proportioned lateral door to the same church. The large unsightly window of the palace Conservatori in Campidoglio is also his work, as well as the Panfili palace at Fontana di Trevi, which has distorted modillions in the entablatures, and other deformities in the windows. The works of this architect shew him to have been a bad disciple of Michael

Angelo. The small palace, which he erected in the Strozzi gardens near to Villa Negroni, is tolerable, and his designs for the Villa Mattei* are certainly well arranged. After having executed many things at Rome and Caprarola, he went to Palermo, his native place, where he was nominated principal engineer; but so much envy was excited towards him, that he was barbarously murdered. He was a tolerably good poet.

MARCO DI PINO, OF SIENNA,

FLOURISHED about the middle of this century. He was a painter; and after executing several pictures at Rome, established himself at Naples, where he also professed architecture.

He remodernised the church of the Trinità di Palazzo; but his principal work was the church and college of the Gesu Vecchio, a magnificent structure, and well arranged, which is now used as the university of Naples. He published a large work on architecture, and made also a collection of the lives of Neapolitan artists.

* The Villa Mattei is situated near San Stefano Rotondo, on the Cœlian Hill, and was commenced in 1581, and terminated 1586. The plan and view will be found among "*les plus célèbres Maisons de Plaisance de Rome, mesurées et dessinées, par Charles Percier et P. F. L. Fontaine.*"

ANDREA BRIOSCO, OF PADUA,

BUILT, about 1501, in his own city, the grand church of Santa Guistina,* in conjunction with Alexander Leopardo, a Venetian; both were architects, sculptors, and workers in bronze. This church is said to be in the *harmonic medium*; and those who are fond of calculation, may testify themselves by the following dimensions:—

The length of the principal nave is 368 feet, the height 82, the width 42, the transept 252 long; it has three naves, and the whole width is 98 feet. It has eight cupolas, and the height of the largest to the top of the statue is 176 feet. From these numbers, it would surely be difficult to discover any harmonious result. Be that as it may, this is one of the most sumptuous and magnificent churches in Italy, and yet is without a façade. This architect was surnamed Riccio, on account of his curling hair: he was also a good statuary, of which there is a proof in the great candelabra, supported by the evangelists, at the altar del Santo, that is, of Sant Antonio at Padua. For this work he received a medal, bearing this inscription:—

Andreas. Crispus. Patavinus Æreum D. Ant. Candelabrum. F.

ALESSANDRO BASSANO,

A learned gentleman of Padua,† built the loggia and hall of the senate-house, in the square of the Signory at

* Voyage en Italie, par M. de la Lande, tom. ix. p. 15.

† Ibid. tom. ix. p. 35.

Padua. The ascent to it was by twelve steps of hard stone. The entrance is divided into seven arches, with two others in the flank, supported by six columns of marble, and by four large double pilasters, of a beautiful Corinthian order, all adorned with sculpture. It was finished in 1526, and is erroneously attributed to Sansovino.

GIULIO PIPPI, CALLED GIULIO ROMANO,

(Born 1492, died 1546,)

A painter of the first class in the school of Raphael,* whose heir he in some respects was: he became equally celebrated in architecture. He designed the beautiful little palace of Villa Madama, now in ruins.† He built another palace on the Pietro Montorio, which now belongs to the duke Lante. He also designed the church of the Madonna dell' Orto, in the form of a Latin cross, with three naves, a well-proportioned and beautiful chapel at the back, and the two arms of the cross semicircular. The beautiful palace of Ciciaporci, on the Strada di Banchi, is by him, and also the palace Cenci, over the Piazza of St. Eustachio, contiguous to the Lante Palace. The duke of Mantua, delighted with the works of Romano, made use of every means to have him near him, and treated him with the most marked distinction. The palace del T., without Mantua, is one of the most renowned in Italy, both for its architecture and paintings. This

* Vasari, tom. vii. p. 197, &c.

† The Villa Madama, so called from having been occupied by Margaret of Austria, natural daughter of Charles V., is situated at a distance of half a mile from Rome, on Monte Mario, out of the gate Porta Angelica. It probably was never finished.

palace was originally intended for stables and other conveniences for the chase, with a small summer residence attached to it, but the design of Giulio Romano carried it to the greatest pitch of magnificence. The room, in which is represented the battle of the Giants, is built in a most singular manner : it is round within, and vaulted ; the walls, windows, and angles, are rustic work, and apparently split and broken, as if falling with the Giants, struck by the thunderbolts of Jove : though its diameter is not above 30 feet, it looks an immense size. The pavement is composed of small round pebbles, and the plinth of the walls is painted in the same style, to correspond with the pavement. He modernised and enlarged the ducal palace, and erected another for the duke at Marmiruolo, five miles from Mantua.

On the arrival of the emperor Charles V., he erected triumphal arches of the most elegant designs.

He raised several new embankments ; and it being in contemplation to erect a number of new houses, the duke issued an edict, forbidding any one to build without the direction or advice of Romano. If such an arrangement were more frequently made, the cities would be more regular, convenient, and beautiful. He erected a house for himself in a very odd taste. He repaired the church of San Benedetto, of the Cassinisi monks, rebuilt the dome, and performed so many distinguished works, both in architecture and painting, within and without the city, that the cardinal Gonzaga used to say, Mantua was created by Giulio, and belonged to him.

His design for the façade of San Petronio in Bologna, was considered the most beautiful, among an immense number, by the most celebrated architects. It is of one order, a medium between the Gothic and the Greek, the better to adapt it to the church. Its grand and picturesque effect cannot fail to delight the spectator, and evidently

shews that Romano even excelled more in architecture than in painting.

The reputation of Giulio Romano stood so high, that he was appointed architect of St. Peter's, and was earnestly entreated to repair to Rome, which he undoubtedly would have done, notwithstanding the repugnance of his family and that of the duke of Milan, had not the hand of death prevented him.

The buildings he left unfinished were continued by Bertani, who erected the bell-tower of Santa Barbara, the finest in Italy.

JACOPI TATTI, CALLED SANSOVINO,

(Born 1479, died 1570.)

HIS father was Antonio Tatti, a Florentine, but being a disciple of Andrea Contucci,* of Monte Sansovino, from the reciprocal affection which existed, and which always should exist, between the master and pupil, he was called Sansovino. At a very early period, he evinced a peculiar genius for architecture and sculpture. He accompanied Giuliano Sangallo to Rome, and studied the antique with great assiduity; he became the friend of Bramante, and a beautiful statue which he executed soon introduced him to the notice of the nobility and artists. His health obliged him to return to Florence, whither pope Leo X. had gone, in 1514. Sansovino then decorated Santa Maria del Fiore, with a false façade of wood, extremely well conceived. On a very large base he arranged couplets of columns of the Corinthian order. Between these were niches, with figures representing the apostles. The columns

* Vasari, tom. ix. p. 291.

supported a cornice and pediment, with various projections. He executed the statues and bas-reliefs, and Andrea del Sarto painted some historical subjects in *chiaroscuro*. The façade was so beautiful, that the pope exclaimed, "What a pity this is not the real façade!" On the return of his holiness from Bologna to Florence, Sansovino erected a triumphal arch at the gate of San Gallo. He also made a design and model for the façade of San Lorenzo at Florence, but although possessed of great merit, that of Michael Angelo was preferred.

On his return to Rome, besides executing a number of statues, he erected a loggia on the Via Flaminia, without the Porta del Popolo, for Marco Coscia; the church of San Marcello, which remains imperfect; and near Banchi, a convenient and beautiful palace for the Gaddi family, and now belonging to that of Niccolini. His greatest work in Rome was a design for the church of San Giovanni, of the Florentines. The Tuscans, then under Leo X., became jealous of the Germans, Spanish, and French, and were anxious to surpass them by building a church, which, in size and magnificence of architecture, should excel any belonging to those nations. Raphael d' Urbino, Antonio Sangallo, and Baldassari Peruzzi, were each anxious to become the architect. The design of Sansovino was preferred by the pope.

The situation selected was on some ground surrounded by the Tiber. The difficulty of making the foundation, and the expense, appeared great to every one; and Sansovino found it more intricate to build in the water than he expected. He failed, and in consequence made a pretext of going to Florence, leaving the care of the building to Sangallo, who successfully performed what Sansovino had not the courage to attempt. From Florence he went to Venice, and on hearing of the election of Clement II. returned to Rome; but a little time after was obliged to escape from it, on account of the sacking of

the city. Abandoning his children he retired to Venice; from thence he went to France, where he had been invited some years before by the king. The doge, Andrea Gritti, being well acquainted with his merit, proposed that he should establish himself at Venice; he willingly accepted the invitation, and was declared proto or principal architect of the Procuratie "de Supra."

His first work in Venice was the repairing the cupolas, which were not injured by age, but by a fire which had happened a century before, and which had so much damaged them, that they were obliged to be supported. He surrounded the centre one over the transept with a large iron hoop, which was, moreover, strengthened with other ties, also in iron. This circle was placed outside, a little above the arches of the large windows. He repaired the others, with much credit to himself. He afterwards continued the Scuola, or building of the Confraternita della Misericordia, which had been began many years before, according to the model of Alexander Liompardo. This building is imperfect, and shews the Sansovinesco character both in the niches and proportions. The whole consists of two magnificent halls, one above and one below, with a staircase and one other apartment: the lower one is of the composite order, divided into three naves, with three distinct orders of columns, and the lateral walls, which support the floor. The church of San Francesco della Vigna, although small, does much honour to Sansovino, but he did not entirely finish it. The cupola and façade were according to the designs of Palladio.

The edifice of the Zecca, or Mint, a truly royal work, entirely of Istrian stone, and rusticated, is one of the finest designs of Sansovino; and still more noble is the famous library of St. Mark. It has two orders: the first a highly ornamented Doric, the second an elegant Ionic, with a grand frieze and noble partition. Over the cornice

is a balustrade, with beautiful statues above, by the ablest scholars of Sansovino. On the ground floor is a portico, raised three steps from the level of the piazza: it has twenty-one arches, supported by pilasters, to which there are external columns, with other arches corresponding to the interior, sixteen of which, with their internal rooms, are used for shops. The centre arch conducts to the noble staircase, divided into two branches. At the top of the staircase is a hall, formerly used for a public school, and now as a museum for ancient statues, the gift, in great part, of the cardinal Dominico Grimani, and Giovanni Grimani, patriarch of Aquila. Beyond this is the library, which occupies seven arches in length and three in width. The ceiling is vaulted, divided into a number of compartments, and ornamented with paintings. On the other side of the building are the rooms for the officers of the Procuratie, but the vault was scarcely finished when it fell; some said from the carelessness of the masons, others attributed it to the extraordinary frosts, many to the discharge of cannon from a ship near it, and some, perhaps with most reason, to the architect's relying too much on iron ties. For this misfortune Sansovino was imprisoned, fined a thousand crowns, and deprived of his situation as Proto. All his friends exerted themselves for him: Pietro Aretino, who, among his many vices, had some virtues, and that rare one of being a sincere friend, was most active in his behalf; and Mendoza, who was first ambassador from Charles V. to Venice, sent an express from Sienna, where he was governor, to assist Sansovino. He was at length set at liberty, his fine remitted, his situation restored to him, and commissioned to build the new vault, which was not of stone, but of reed-work, plastered. On adorning it with the Doric order, Sansovino proposed this problem, — "How to make the exact half of the metope fall in the angle of the Doric frieze." All the architects of Italy endeavoured to solve it; Sansovino did

so, by lengthening the frieze to supply what was wanting in that portion of the metope: both the problem and the solution are absurd. He made the entablature a third of the height of the column, which is unexampled in any thing either modern or antique. The library of San Marco has been censured as too low, when compared with the ducal palace, to which it is opposite: but Sansovino had in view the height of the old Procuratie over the great piazza, which he wished it to resemble, in order that the whole square should be surrounded by buildings of the same altitude. Scamozzi, carried away by his vanity, afterwards altered the design. Palladio considered the library the most highly ornamented building that had been erected, from the time of the ancients to the present. It is embellished with every variety of marble, beautiful columns, bas-reliefs, stuccoes, and statues; and the architecture is devoid of any unnecessary projections; the cornice of the first order is not too large, and that which crowns the superior order performs its proper office.

The palace of the Cornari, on the grand canal at San Maurizio, is one of the most successful works of Sansovino. He also built on one side of the campanile of San Marco a loggia, for the Venetian nobles and virtuosi to assemble in, but it is now used for the Procuratore of San Marco, who remains there on guard during the sitting of the great council. This small edifice is somewhat elevated above the level of the square; the ascent is by four steps to a small terrace, surrounded on three sides by a balustrade, which is before the façade. This latter has eight columns, detached from the wall, of the Composite order, supporting an elegant and continued entablature. Between the greater intercolumniations are three majestic arches, through which is the entrance to the gallery. The four minor intercolumniations are filled by four highly ornamented niches. Above, and plumb with the arches, is an attic, divided into three larger and four lesser open-

ings, corresponding with the seven intercolumniations. Over the attic is a balustrade, which is continued along the three sides of the building. The whole is of marble, with fine statues and bas-reliefs. This loggia was to have surrounded the campanile entirely.

When repairing the church of Santo Spirito, he erected the choir and façade. He built the Delfino palace, on the grand canal, near San Salvatore: the interior is conveniently arranged, and the façade, towards the canal, extremely noble. The church of San Salvatore was begun after the design of Giorgio Spavento, and terminated by Tullio Lambardo in 1569. Scammozzi afterwards opened a lantern in the cupola, to admit more light.

The church of San Fantino, one of the finest in Venice, is by Sansovino, as is also that of San Martino, near the arsenal; that of the Incurables, of an elliptical figure, and the School of San Giovanni, degli Schiavoni, the Cortile del Bo, or the University, and the great council hall at Padua; although the latter is not in his usual style.

Many of the buildings at the Rialto, now called "the New Buildings," particularly one at the public expense, and erected for the convenience of commerce, was also designed by him. It has three stories; the first is rustic, distributed into twenty-five arches; the second Doric, and the third Ionic, with windows corresponding to the arches. In the first are a number of shops, for various uses, with stairs leading to the other two; each of which is divided into three parts, one corridor in the centre, and two files of rooms at the sides. But the great fault in this building is, that the walls of the corridors, instead of corresponding with those underneath, are placed across the vaults; there is consequently always a fear of danger, and constant repairs required. It is extraordinary that so great an architect as Sansovino should have fallen into such an error. He made a design for the bridge of the Rialto, which was not carried into effect, and is now lost.

Sansovino shewed his abilities in the church of San Geminiano, over the piazza of San Marco, and succeeded admirably in uniting the interior cornice of the arch in the chapel with the ornaments of the principal order in the church. This chapel was erected in 1505, from a model by Christoforo del Legname, an architect and sculptor. Sansovino ornamented all the parts with such elegance and proportion, that this is considered the most beautiful church in Venice. He succeeded equally well in the façade, which is divided into two orders, with a beautiful door in the centre, and well proportioned windows in the lateral intercolumniations. With regard to the height, he had in view the old Procuratie, wishing this façade to be higher than the lateral buildings by the pediment of the attic. It is to be regretted that the buildings of the great square were not continued in two orders, according to the intention of Sansovino. Scamozzi added a third order, and the square is no longer surrounded by edifices of equal height.

In the ducal palace he built a staircase, which, although difficult of ascent, is nevertheless noble and majestic. In the church of San Fantino he erected a rich chapel, of the Composite order, with four majestic fluted columns supporting the arches, and an elegant cupola. He made a simple and elegant design for the sepulchre of the signor Podacataro, in the church of San Sebastiano. Above a solid basement are two grand columns, supporting an arch, with an entablature and pediment, and in the centre of the arch is placed the urn. That of the doge Veniero, in the church of San Salvatore, is still more beautiful; the order is Composite, and between the lateral niches are two statues by Sansovino, who was then eighty years of age.

The wonderful bronze gates in the sacristy of San Marco were designed by Sansovino, who introduced his own portrait, with those of Titian and Aretino, his two faithful friends. Such was the reputation of Titian and

Sansovino, that in an extraordinary tax raised by the senate, these two men alone were exempted, to shew the esteem in which they were held. This architect died at the age of ninety-one, and was buried in San Geminiano. He left a rich estate to his son, Francesco Sansovino, who rendered himself celebrated by his description of Venice.

Jacopi was fertile in invention, of a cheerful disposition, and noble in his aspect. His architecture was elegant and full of grace, but deficient in strength and solidity. He used the orders, especially the Doric and Composite, continually; his ornaments were exceedingly correct. He sculptured the members of the cornices, introducing bas-reliefs and statues; consequently adding much to the decoration and majesty of his buildings.

Scamozzi refers to a useful work, written by this architect, on the construction of floors, and particularly describing a method adopted by him to prevent the dust falling through the joints of the boards. This work is now lost.

GIOVANNI MERLIANO, OF NOLA,

(Born 1478, died 1559,)

INSTEAD of following the business of his father, that of a leather-merchant, he attached himself to drawing, and studied under Agnello Fiore, a Neapolitan architect and sculptor; and in order to improve his knowledge in these two professions went to Rome. On his return to Naples, he worked most indefatigably, and produced so many excellent pieces of sculpture, that his reputation became greater than that of any other Neapolitan sculptor. The

principal churches of Naples are adorned by his hand; but his best performances are the tombs of Andrea Bonifacio, in the church of San Severino, and of the viceroy Don Pietro di Toledo, in the choir of San Giacomo, belonging to the Spaniards.

He built the latter church, and that of San Giorgio, belonging to the Genovese. He reduced the Castle Capuano into a tribunal of justice; and although composed of two halls of such prodigious dimensions, they are not sufficiently large for the immense concourse of people who assemble there.

He principally directed the festivals in honour of Charles the Fifth's triumphant return from Tunis. Over the piazza of the Porta Capuana was erected a triumphal arch, 86 feet high, 78 wide, and 45 deep, with three openings in front and one in each flank, decorated with double Corinthian columns, supporting a whimsical entablature, and enriched with paintings and sculpture, alluding to the actions of the emperor.

Giovanni da Nola made designs for the palace of the prince San Severo, and for that of the duke della Torre: they were magnificent and well arranged.

He also adorned La Punta del Molo with a fountain, in which was represented the four principal rivers in the world. He went, with many others, to Spain, by order of the viceroy Don Pietro Antonio of Arragona, to embellish his gardens.

He also had the arrangement of the magnificent street at Toledo, which would have been better had it continued in a strait line to the palace, intersected by three or four ample and regular squares.

This great artist added to his rare talents an excessive mildness of character; he was consequently universally esteemed, and lived tranquilly till his eighty-first year.

FERRANTE MAGLIONE AND GIO. BENINCASA,

NEAPOLITAN architects, and contemporaries with the last, erected under the viceroy of Toledo a variety of buildings, among them the royal palace, now called the old palace, and which ought not to be allowed to remain.

FERDINANDO MANLIO, A NEAPOLITAN,

Is supposed to have been a pupil of Giovanni da Nola, and distinguished himself in the great hospital and church della Nunziata, where is his epitaph. He opened the road to the Porta Nolana, built a royal casino, or summer-house, at Pozzuoli, and drained a number of marshes: all of which was by the order of the celebrated viceroy of Toledo. He also executed the regulations of the viceroy duke of Alcalà, by opening the noble road of Monte Oliveto, erecting palaces where there were originally only the gardens of monks. He enlarged the grotto of Pozzuoli, and built the bridge of Capua.

MASTRO FILIPPO, A SPANIARD,

RESTORED the famous cathedral at Seville, in 1512, one of the finest Gothic works, began in 1401. It is 420 feet long from east to west, 273 wide, divided into five naves,

surrounded by chapels. The vaults spring from thirty-two arches on each side. The whole is of Paonazzetta stone, and for a roof has one grand vault, surrounded by balustrades. There are eighty painted windows. However much we may be prepossessed in favour of the Grecian architecture, it is impossible on entering this church not to be delighted at the grandeur and simplicity with which every thing is disposed ; yet the original architect is unknown. It was finished in 1506 ; but in 1512 a pier gave way, and the whole became ruinous.

Mastro Filippo made it less lofty, and it is said more beautiful than at first.

GIOVANNI DE OLOTZAGA

WAS a native of Biscay, and about this time built the cathedral of Huesca in Arragon, on the site of the celebrated mosque of Mislegda. This work is much admired ; it has three stone naves, of good proportions. The principal façade is grand, with fourteen statues, larger than life, on each side the entrance, placed on pedestals within niches, and above these forty-eight smaller ones, a foot in height, variously arranged ; over the door is the image of the Virgin, with the adoration of the kings on one side, and the appearance of Christ to Mary Magdalen on the other ; the pediment contains a sort of altar, of a single stone, in which the architect has sculptured a representation of the whole temple most delicately.

Under Ferdinand “ the Catholic,” and Isabella, both attached to the fine arts, architecture changed its features in Spain, and the Gothic gave way to the Greek. In this style he built the great college of Santa Croce, at Valla-

dolid, began in 1480 and finished in 1492, the foundling hospital at Toledo, founded by the cardinal Don Pietro Gonzales de Mendoza, and the great college of Sant' Ildefonso, founded by cardinal Ximenes.

PIETRO DE GUMIEL

Is thought to be the architect of Santa Engracia at Saragossa. The façade is of fine sculptured stone. In 1498 he began the college of Alcala, a sumptuous building in a mixed style. The whole is of stone, and divided into three ample courts: the first has a Doric portico, with arches, and two orders of galleries above, one having columns also Doric, the other Ionic; comprising in all ninety-six: the second court has thirty-two Composite columns, and between the arches are some fine heads: the third court has thirty-six Ionic columns, beyond which is the theatre. The church has Ionic columns, richly sculptured. Here is the monument of cardinal Ximenes, the founder, considered one of the grandest in Spain: it is by Vergara.

GIOVANNI ALONSO

BUILT the Sanctuary of Guadalupe, before which is a spacious vestibule, raised on a number of steps, serving as a base to the façade, which consists of five lofty Gothic pilasters, with arches between; two of these are open for

the entrance. The interior has a chapel, in the style of a portico, from which is the ascent, by twenty steps, to the magnificent temple. Immediately on entering is a tablet, with this inscription : —

A qui yace Juan Alonso Maestro que fizo esta Santa Iglesia.

The church consists of three naves, divided by clusters of columns, with three arches on each side. The addition of the choir has deprived them of much of their majesty, by concealing one of the side arches. The great altar is by Giovanni Gomez de Mora. It has four floors; the three first have each eight Corinthian columns, and the last, at the top, four. The greater part of the rich vessels and furniture are the work of Giovanni di Segovia, a monk of the same church, and the finest goldsmith of Spain.

FRA GIOVANNI D' ESCOBEDO

WAS born in the mountainous part of Spain, and educated at Segovia. Being learned in geometry and architecture, he was commissioned to repair the famous aqueduct of Segovia, a Roman work, which had fallen to decay. The queen Isabella, who was equally attentive with her consort to preserve the ancient edifices, employed another, friar Giovanni, a monk of St. Geromino del Parral, to conduct and distribute the water in the city of Segovia. But how poor are these works when compared with those of the ancients. The whole consists of three bridges, more useful than magnificent.

GIOVANNI CAMPERO,

By order of the cardinal Ximenes, erected the church and convent of San Francesco at Fordelaguna, his native country; but the building was scarcely begun when the architect abandoned it for a work of greater fame and profit, the cathedral projected at Salamanca. He was, however, obliged to return and continue his first undertaking. In consequence of the cardinal's haste and his own, which was, perhaps, greater, one wall was raised out of the perpendicular, and fell. The cardinal excused this misfortune, as one not uncommon even with the best architects. The work was completed, with the addition of an aqueduct.

The style between the Gothic and the Greek was continued in Spain during the greater part of the reign of Charles V.

GIOVANNI GIL DE HONTANON

MADE a design for the cathedral of Salamanca, which was submitted to the consideration of the four most able architects in Spain, Alonso de Cobarrubias, the architect of the church at Toledo, Mastro Filippo, of that of Seville, Giovanni di Badajos, of that of Burgos, and Giovanni Balleso, by whom it was approved and commended.

This church is 378 feet long, and is divided into five naves; the centre one forming a Latin cross, 50 feet wide and 130 high; the side aisles are 37 feet and a half wide and 88 high; the others are divided into chapels, 28 feet

wide and 54 high; the columns of the nave are 3 feet in diameter, and those of the transept 12. The whole is vaulted, and of square stones, with a large tower of the same material.

Rodrigo Gil, son of the above-named architect, had the execution of it, and began it in 1513. He was, however, greatly interrupted by some objections of the chapter; and on its being referred to Philip II., they were ordered to abide by the decision of Giovanni di Rivera Rada, an architect of great fame.

It was, perhaps, this Rodrigo who, in 1525, erected the church of Segovia, very similar to that of Salamanca, except that it is more simple, and more in the Greek style.

The cathedral of Segovia, which in size and majesty is equal to those of Toledo and Seville, was begun in 1525 by Rodrigo Gil de Hontanon, who had the direction of it till 1577; it was then carried on by Francesco de Campo Agüero, who died 1660, and to whom succeeded Francesco Biadero, who died 1678. At one end of the church are the stone sepulchres of the three above-named architects, mentioned by D. Antonio Ponz, in the tenth volume of his *Travels in Spain*, published 1781. The Signor Ponz observes, that Hontanon must have been a clever architect, and well acquainted with the Greek and Roman style, which in his time was beginning to revive; but that, like many other artists, he was obliged in some measure to humour the taste of those who employed him, he therefore adopted the Gothic style, without the ornaments and details. All the cathedrals of this class are considered by the above author to resemble a theatre, and that where the Romans in their circuses placed the spina, are the choir and larger chapels. We have no sufficient documents to prove whether this opinion be correct.

The principal altar has been lately adorned, at the king's expense, by a design of Sabbatini, who has erected four

Composite columns, with bronze capitals, and some statues and angels. The church has three naves, with a variety of chapels within, containing many fine specimens of art. One lateral door is of excellent architecture, consisting of two parts; the inferior has two Ionic columns on each side, with niches between, and the superior Corinthian column, and the statue of the protecting saint. This is considered to be the work of Giovanni di Herrera, or of Francesco de Mora. The façade is magnificent, not loaded with ornament, and the small embattled pyramids are of a good proportion. There is a cupola in the centre, between the great altar and the choir.

PIETRO DE URIA

CONSTRUCTED the bridge of Almaraz, over the Tagus, a few miles distant from Plasencia, a work which may vie with the boldest efforts of this description. Two large Gothic arches form the bridge, 580 feet long, 25 wide, and 134 high. The opening of one arch is 150 feet and a half, that of the other 119. The piers are lofty towers, and that in the centre stands on a high rock. Another pier has a semicircular projection between the arches, forming a piazza at the top. On this is an inscription, importing that the work was erected in 1552, at the expense of the city of Plasencia, under Charles V., by Maestro Pietro de Uria.

ENRICO DE ARPHE,

A German, who preserved the taste of the German architecture, which he evinces in his works, both in gold and silver, and especially in the treasures of Leon, Toledo, Cordova, and many others in various parts of Spain.

He was father of Antonio, and grandfather of Giovanni de Arphe, the author of that useful work, "*De Varia Commensuracion*." He was also a poet, and author of a work comprising the rudiments of drawing.

ALONZO DE COBARRUBIAS,

If not born, resided at Toledo, where, by his wife, Maria Gutierrez, he had many sons; among whom, the most celebrated was Don Diego Cobarrubias, bishop of Segovia, counsellor of state, and president of Castile, who attended the council of Trent, accompanied by his brother, Don Antonio, auditor of Grenada, and afterwards counsellor of Castile and magistrate of Toledo.

Alonzo first introduced Roman architecture, which was firmly established in Spain under Charles V., whose continual journeys to other countries contributed much to this fortunate event. Good taste had then awakened in Italy, it was thence transported to Spain, which at that time gave laws to Europe. We shall, however, see that this was but of short duration.

Cobarrubias was the architect of the church of Toledo; of extremely ancient origin, founded, in 587, under king

Flavio Reccaredo: it was afterwards converted into a mosque, and subsequently changed to a church, under San Ferdinando, and rebuilt by one Pietro di Pietro, who died 1328. This temple is in the Gothic style, magnificent and well-proportioned, 404 feet long and 203 broad. The highest of its five naves is 180 feet, with eighty columns, or clusters of columns. The façades are highly ornamented, with a tower 284 steps high, which is 20 feet in the opening, and as many in thickness. The various riches collected in this temple are supposed by some to be worth more than the whole of Toledo.

In the same city Cobarrubias erected the façade of the Alcazar, or royal palace. The interior vestibule is a mixture of Gothic and Greek. It was begun under Alphonso VI., 1085, and finished under Charles V. by one architect, who erected a superb façade and vestibule, embellished with columns. The door has two Ionic columns, with an ornament above, over which are two others, placed over the opening, with a pediment. The windows are also ornamented with columns, attached to the wall, and triangular pediments. This edifice suffered much from the English troops at the beginning of this century, but it has been restored latterly under the archbishop, by the architect Ventura Rodriguez.

At Valentia, where the duke of Calabria D. Fernando of Arragon resided, Cobarrubias built the monastery and temple of San Michel de' Re, of the order of San Girolamo; a work of great magnitude, in which also Vidanna, and afterwards Martin d' Olindo, assisted.

DIEGO SILOE,

A native of Toledo, and assistant to Cobarrubias in the restoration of good taste in architecture. He built the cathedral of Grenada, with the monastery and church of San Girolamo in that city. The cathedral has three naves, of a disproportionate height. The Corinthian order is defective in its height, and the capitals, members, and sculptures, are too fanciful: the cupola is beautiful and magnificent.

The great chapel of San Girolamo, with the royal monastery, founded in 1496, is one of the finest in Spain. It was obtained from Charles V. by the duchess of Terranuovas, Donna Maria Maurique, wife of the famous captain Gonsalvo Fernandez of Cordova, for a private chapel, and Siloe adorned it with a Corinthian order, but in a barbarous style. The cloister is graceful and well arranged.

To Siloe is attributed the royal hospital, and some other edifices: but both Siloe and Cobarrubias made the value of their buildings to consist in loading them with sculpture, from an idea that beauty and richness were synonymous. Many modern architects are of the same opinion.

DAMIANO FORMENT,

AN architect and sculptor of Valenza, erected the façade of the church of Sant' Engracia of Saragossa, 60 feet wide and 105 high, entirely of alabaster, divided into four orders of columns, with statues larger than life within niches.

He also made the altar screen, of alabaster, of the cathedral of Huesca; it is divided into three orders by three historical subjects, executed in alto-relievo: it was begun in 1520, and finished in 1533. It is not known whether he erected any entire buildings, he is only named as designing and executing ornaments.

MARTINO DE GAINZA,

THE architect of the royal chapel of Seville, which is overcharged with ornaments. It was continued by Ferdinando Ruiz, and finished in 1575 by Alonzo de Meyda. The building is of hewn stone, of the Composite order.

ALONZO BERRUGUETTE,

(Died 1561,)

A sculptor, painter, and architect, was born at Paredes de Naba, near Valladolid. He went to study in Italy in 1500, and was at Florence when Michael Angelo and Vinci exhibited their cartoons, which produced an immense number of artists, among whom was Berruguette.

Charles V. was desirous of having him for his architect, and honoured him with the order of the golden key. It is thought that he designed the palace of Madrid, which was begun by Henry II., continued by Henry III., and most sumptuously rebuilt by Charles V., but it no longer exists.

Berruguette erected the gate of San Martino, which is the principal entrance to Toledo; it is of the Doric order, with the royal arms on the exterior, and a statue of Santa Leocadia in the interior,—an elegant and simple work. To him is also attributed the palace of Alcala, belonging to the archbishop of Toledo, a grand building, though defective in some parts: a great portion also of the cathedral of Cuenca is said to be by him; not the façade, which is of a bad taste, and erected, 1669, by Giuseppe Arroyo, and afterwards continued by Luigi Arriaga. The cloister is grand, from the variety and multiplicity of the ornaments, which are well executed. The great altar of the church and the chapel, called the *Trasparente*, designed by Ventura Rodriguez, have both much merit. Finally, it is thought that Berruguette had some part in the Pardo, which was rebuilt in 1547, where is still allowed to remain, notwithstanding the additions by Philip II., the miserable eastern and western façades,—the porticoes of Ionic columns, with their low stone arches. The windows are too far apart, and too small in the inferior story, the stairs are also difficult to ascend; yet, with all these defects, the edifice is well arranged and executed.

The taste of Berruguette is most conspicuous in the architecture of screens and altars. In the arrangement of the orders, he followed the bad style of employing them all, one over the other. He was, however, learned, and well acquainted with each.

His principal merit was as a sculptor, and he was considered the first in Spain. Toledo is full of his works, and those of his contemporary, Philip of Burgogna. His last was the marble sepulchre of the cardinal di Tabera, in the church of his great hospital at Toledo, where the artist died extremely rich, from the profit of his works.

PIETRO DE VALDELVIRA,

BETWEEN the years 1540 and 1556, built in Ubeda the famous chapel del Salvatore, by order of the commendator Don Francesca de Los Cobos, for whom he also erected a palace. Both these buildings are profusely ornamented. It is uncertain what he did in the church of Gaen, for which he gave the design.

In 1562, he built the hospital and chapel of San Giacomo in Baeza, which is considered one of the best buildings in Andalusia.

PIETRO EZGUERRA,

(Died 1561,)

A native of Ojebarr, near Perayas, the architect of the churches of San Matteo de Caceres, of Robledillo, near Plasencia, of Malpartida, and the cathedral of Plasencia; all considerable works.

The church of Malpartida has an imposing façade, though of two orders; the first has four columns, with statues in the centre, the second has two, flanked with vases, and terminated with candelabrae of good design. The whole is of granite. There is also a façade within, which resembles the Gothic, being of three orders, with a number of sculptures, among which are many of satyrs. The interior has a grand nave, also of granite, with Corinthian columns in the choir.

On the death of Pietro, his son, Giovanni Ezguerra, a Dominican friar, continued these buildings, and after him Giovanni Alvarez finished them, in 1574.

The cathedral of Plasencia has two façades, that of the north, of granite, and of three stories, two with columns, and the last with pilasters, with a multitude of whimsical ornaments, and flanked by two lofty and highly ornamented towers. The other façade is a little less whimsical. The interior is one great nave. The great altar is of three orders, all Corinthian, each having eight columns, oppressed with statues and bas-reliefs; the principal of which are by the famous Gregorio Hernandez. The choir is most extravagant, being covered with sculptures, the subjects of which are both improper and ridiculous,—animals, and a variety of fables.

The style of these two edifices is the modern Gothic, and they would have retained the first place among those of their kind in Spain, had they been finished by the original architect; but from the length of time they employed in building them, a variety of absurd changes were introduced.

FERDINANDO RUIZ,

BORN at Cordova, was the principal architect of the church at Seville, where he executed a number of things; the most noted was that of enlarging the great tower, called Giralda.

Some suppose that this singular edifice was began in the 11th century, Bernebet Almucamas being king of Seville: the idea was given by the architect, Geber, a native of Seville, to whom is attributed the invention of

Algebra, and the design of two other similar towers;—the one at Morocco, the other at Rabata. This tower was at first 250 feet high and 50 wide, without any diminution; the walls are 8 feet thick of square stones, from the level of the pavement; the rest is of brick for 87 feet.

The door is so small, that it will barely admit one person. In the centre is another strong tower, higher than the exterior one, and 23 feet thick. The interval between the two towers is 23 feet, and serves for the ascent, which is so convenient, that two can mount it on horseback. The centre tower does not diminish, but as the exterior increases in height the walls widen internally, so that the ascent narrows, and will only admit one person. The windows are carried up, conformable with the ascending inclination, but appear level on the exterior. Every window has three columns, and in the whole tower there are 140, of various marbles. The entablature was crowned by four large globes of gilt bronze, one over the other, so resplendent, that when the sun shone on them they were visible for eight leagues. When the Moors of Seville negotiated their surrender to San Fernando, who had besieged the city sixteen months, one of their conditions was, that this tower should be destroyed; but Don Alphonso, eldest son of the king, replied, that if one brick of it was touched, not a man should be left alive in Seville. In the destructive earthquake of 1395 the globes fell, in which state it remained till 1568, when the chapter ordered Ruiz to raise them 100 feet higher.

He divided the 100 feet into three parts, with a small cupola or lantern at the top; the first division is of the same thickness as the tower, on a plinth of 3 feet, and six pilasters on each façade, with five windows: over these is an entire entablature, with balustrades: the second is narrower, with the same ornament above: the third is octagonal, with pilasters, over which rises the cupola,

surmounted by a bronze statue of Faith, vulgarly called La Giralda.

By this work, Ruiz acquired the fame of being an ingenious architect, particularly with regard to its solidity. In fact, notwithstanding the frequent earthquakes, the Giralda still remains secure.

A tradition is preserved in Plasencia, that the artificer of the choir to the last-named cathedral, thinking he had performed a *chef-d'œuvre*, said, that not even God himself could do better. For this expression he was confined in a tower, from which he thought to escape by means of wings. He ate little to make himself lighter, and only birds, that he might acquire their natural elasticity, and at the same time he observed the quantity of feathers necessary for each wing. He weighed every bird, both before and after it was stripped of its feathers, and preserved the latter; and after much reflection he found, that for every two pounds of flesh four ounces of feathers were requisite. Overjoyed at this discovery, he anointed himself all over with some gum, covered his body with feathers, and with two large wings in his hands threw himself from the top of the tower, and with great address fell down dead in a meadow. When this flight, as it is termed, happened, or in what nest this wonderful bird was hatched, it signifies little to know; there is scarcely a tower to which some such story is not attached. But if our artificer could not imitate Dædalus in his flight, he certainly has surpassed him in the choir, which is more intricate than any labyrinth.

GASPARO BECERRA

(Died 1570,)

WAS born at Baeza, in Andalusia, studied at Rome, and acquired the commendations of Vasari. On his return to Spain, he exercised the three arts in the screen of the cathedral of Astorga, and in the church of the Scalze Reali of Madrid he erected the great altar, with two orders of columns, the first Ionic, the second Composite, with a pediment, and a variety of sculptures much admired. He was also a sculptor and painter, but as an architect he only practised in the ornamental parts, in which he succeeded even better than Berruguette.

MACHUCA

BUILT the royal palace of Granada, entirely of wrought stone, by order of Charles V. The principal façade is rustic, with three large gates, and eight Doric columns on pedestals, sculptured with historical bas-reliefs.

The second story is Ionic, with eight columns, and above them pilasters. The internal vestibule is circular, with a portico and gallery, on columns of the same order: the architraves are one single piece of marble. It is to be regretted that there are arches springing from the columns. The rest of the work is well arranged; the vestibule especially is of good proportions, and ingeniously managed.

DOMINICO TEOTOCOPOLI,

(Born 1548, died 1625,)

SURNAMED Il Greco, on account of being born in Greece. He was a disciple of Titian, and became a good painter; but he neglected the art, to avoid the imputation of imitating Titian in his extravagancies. He died at Toledo, at the age of eighty, and had two celebrated pupils called Tristan and Mayno.

Il Greco also practised sculpture and architecture at Madrid. He built the college of Donna Maria d' Arragona, a regular building, and without ornament. In Toledo, the Dominican church and convent; and a house in that city, called Ayuntamiento, which is a delicate and elegant piece of architecture.

The church and hospital, della Carita, at Illesca, between Madrid and Toledo, is of his design; beautiful, imposing, and magnificent. It is disfigured by a species of balcony, with balustrades, which runs from the great chapel to the transept, cutting the Corinthian pilasters. This appears to be placed for the purpose of supporting fifty silver lamps, as if in these the magnificence of the church consisted. Lamps certainly are as necessary in churches as the glow-worm is to the day. There are six altars, each having two Doric columns. The great altar has clustered Corinthian. In this church Il Greco painted the picture of Sant' Ildefonso, and sculptured two statues of the prophet.

But his grandest work was the church and monastery of the Bernard monks of San Dominico di Silos. The whole is by him, — architecture, painting, and sculpture.

GARZIA D' EMERE,

IN 1594, built the parochial church of Valera, near Cuenca, the façade of which has four Ionic columns, on pedestals, with a balcony ornamented with statues. The church is Gothic, but the great altar is in another style, having four Composite columns, with as many Corinthian ones above them.

BARTOLOMMEO DI BUSTAMENTE,

ALMONER of the cardinal Giovanni de Tayera, archbishop of Toledo, was the architect of the hospital of San Giovanni Battista, founded in 1545, by the archbishop, near Toledo. His design was approved by Ferdinando Gonzales, de Lara, and by Vergara, both architects of the church of Toledo. The court has porticoes of Doric columns, supporting arches, with a loggia of Ionic columns; in all 112, and all of granite.

From the centre of this sumptuous court we enter the church, which is well-proportioned, and in a light and elegant style.

GIOVANBATISTA, OF TOLEDO,

(Died 1567,)

AN architect and sculptor of great merit, well versed in philosophy, mathematics, and the belles lettres, and endowed with all those qualities which Vitruvius considers necessary to form a good architect.

After having studied at Rome he visited Naples, being sent for by Don Pietro di Toledo, the viceroy, who employed him as architect to the emperor Charles V. in many important works in that capital. Among others, are the magnificent strada di Toledo, the church of San Giacomo degli Spagnuoli, a magnificent palace at Pozzuoli, or rather at Posilipo, a number of fountains, and other ornaments, which acquired Giovanbatista so much fame, that he was nominated by Philip II. architect to all the royal works of Spain, and of the Escorial, which that monarch wished to erect in the most sumptuous manner. For this purpose he left Naples in 1559, and removed to Spain. But his wife, Orsola Jabarria, who embarked afterwards, was shipwrecked and perished, with her daughters, and the immense riches acquired by Giovanbatista; who, in addition to these terrible losses, had to carry on a lawsuit with his father-in-law, Girolamo Jabarria, who required the restitution of his daughter's marriage portion.

The only architect who gave the design for the superb façade of the Escorial was Giovanbatista di Toledo. He commenced the work in 1563, as is clearly shewn by

a stone in the portico of the church, with this inscription : —

Deus. O. M. operi. aspiciat
Philippus II. Hispaniarum. Rex.
A fundamentis erexit
1563,
Joan. Baptista, Architectus,
9. Kal. Maii.

He continued to superintend the building during his life, and died at Madrid in 1567. He was succeeded in this great undertaking by Giovanni d' Herrera, his pupil, who finished it. They are, therefore, unacquainted with the subject who attribute this work to Luigi de Fox, to Bramante, to Peregrino, to Vignola, and to other architects, who may, perhaps, have given some designs, but which were not selected.

There have been numberless other fables with regard to this edifice: as that it had 11,000 windows, 14,000 doors, double the real number,—800 columns, whereas there are not above 200,—that the royal arms are on a rare stone brought from Arabia, though quarried in the neighbourhood,—that twenty-five millions of gold were spent, when, in fact, it cost a little more than six millions of ducats,—that the roof of the church was painted by Titian, in fresco, though it is by Luca Giordano,—that the windows of the library are of crystal, with frames of gilt silver,—and that it contains 100,000 volumes, which may be reduced to 30,000, and the windows are mere glass, with lead frames. The Escorial requires no exaggeration; a simple and exact description is sufficient to convey an idea of its magnificence.

The motives which induced Philip II. to order the building of this structure were two,—the dying injunction of his predecessor, Charles V., who at that time was desirous of constructing a tomb for the royal family of Spain, and the other to erect a monument, certainly supe-

rior to any triumphal arch, to commemorate the famous victory of San Quintin, gained on the festival of San Lorenzo, to whose intercession the king supposed he owed his success.

A delightful situation was chosen, a few miles from Madrid, at the foot of the Carpentani mountains, which divide the two Castiles. This pile is composed of a magnificent monastery, which was given to the fathers of San Girolamo, so much beloved by Charles V. and Philip II., of a college, a seminary, and a royal palace; with the addition of a number of villages, gardens, fields, hospitals, country houses, and other buildings for various purposes.

The plan of this edifice resembles the form of a gridiron, alluding to the instrument of the martyrdom of San Lorenzo. The royal palace is supposed to represent the handle.

It is internally divided into fifteen courts, of various sizes, the largest are ornamented with porticoes and galleries. It contains more than eighty fountains. The whole building is of granite, both in the interior and exterior, taken from the Spanish quarries, and worked and joined with great ingenuity. The roofs are slated, in some parts covered with lead, particularly that of the church; the cupola is stone.

The eight towers, four of which are at the angles of the edifice, and the others between, form, with the cupola, a contrast, which contributes much to the magnificence of the edifice; an edifice which, from its long and erect façades, its unornamented form, and its peculiar materials, presents an aspect of solemn grandeur, corresponding with the character of the monarch under whom it was erected.

The principal façade, looking towards the west, is 740 feet long and 60 high, to the cornice, which continues, without interruption throughout. The towers at the four angles of the edifice, and which flank each façade, are 200 feet high. This façade, like the others, is divided

into five stories of windows, for the most part small, between horizontal and vertical string courses. Such a number of stories, together with 200 windows, cut the great mass into too many divisions. It has three doors, with decorations, one in the centre and the other two at the sides, each equally distant from the middle and the extremities.

The centre compartment is 140 feet long, and has two orders of columns, half attached to the wall. The lower has eight Doric semi-columns, on a plinth; in the centre intercolumniation is the door, and niches in the others. The superior order has four Ionic columns, on pedestals, corresponding with the four inferior Doric columns. Over the Ionic is a triangular pediment, with globes at the three points; which same ornament is attached to every other pediment, as well as to the towers.

In the centre of this Ionic order is a niche, containing the statue of San Lorenzo, sculptured by the celebrated Giambatista Monegro, by whom are the statues of the portico of the church; and it is asserted that these seven statues are from one block of stone. It is also flanked by four obelisks, with globes at the top. The decoration to the other doors consists of a niche and pediment.

The façade opposite to the east is 1100 feet long, and from the projection, which forms the palace and the great chapel, contains 366 windows; the whole receives additional magnificence from the chapel, which, with its cupola and pediment, forms a back-ground.

The south side, looking towards the gardens, is 580 feet long, with 306 windows. The north side has three doors, two of which open into the palace and one to the college. The palace has no large doors, the entrance is only through these side ones, and along narrow passages, which lead to the staircase. Philip II. was so good a servant of God, that he wished the royal palace to be

nothing when compared with the monastery, and other works consecrated to his service. In fact, a great part of the court lodged in the cells.

On entering the middle gate of the façade of the west, is a portico or vestibule, dividing the monastery from the college. This vestibule is 30 feet wide and 84 long, ornamented with pilasters, supporting arches and openings, with a gate at each extremity, and a window above. From thence three grand arches lead into the king's court, 230 feet long and 136 wide, surrounded by habitations of five orders of windows, ornamented with pilasters or fascies. At the end of this court is the temple; previous to approaching which, and over the vestibule, are the libraries, with a façade, corresponding with the principal exterior, ornamented with pilasters.

The approach to the temple is by seven steps, which gives it a more lofty appearance; and on this basement is a beautiful Doric porch, of five arches; the three in the centre project forward, with semi-columns, with which those of the extremities are united.

The three arches lead to the church, the other two to the monastery and the college. Between the arches and the cornice are as many windows. Over the entablature, and plumb with the columns, are a number of statues in stone. Behind this porch rises the façade of the church, the windows of which correspond with the inferior ones, and above a large window arched, which cuts the cornice of the pediment very awkwardly. This façade is flanked by two towers, for bells, clocks, and chimes; which towers form a part of the monastery and college, and are ornamented on the most prominent parts with pilasters, between which are windows and niches, with parapets, balustrades, and globes, terminating in small cupolas; over which are obelisks, globes, and crosses.

The interior of the church is Doric; the principal nave

is 53 feet wide; the smaller ones can scarcely be called such, being, in fact, nothing but mere passages, in which are chapels, 30 feet wide: the whole length is 364 feet, width 230, and the height 170. It is divided and supported by piers, 53 feet distant from each other, and 30 feet in circumference. From the piers, which have their pilasters channeled, like those on the walls, spring arches; in all 24. On the opposite side are two niches, also corresponding with those on the walls, and under these are the chapels, with the altars; amounting in all to forty-four. From the centre rises the cupola, of a good form; but in the interior, instead of having a cornice with a balustrade, it has bands, badly united. Its diameter is 66 feet, and the exterior circumference 295. The height from the pavement to the cross is 330 feet. Its exterior is, ornamented with a drum, which has a parapet with balustrades, and Doric columns; in the intercolumniations of which are eight windows, with as many niches and recesses above. Over the cornice is another balustrade. The dome is divided into fillets, or ribs, correspondent with the columns; the lantern has also eight windows, and at the top a pinnacle, with the ball and cross. If the plan of Giovanni d' Herrera had been followed, namely, to raise the basement of the cupola 11 feet higher, it would have acquired a more advantageous elevation.

The choir is not more than 30 feet high, the pavement of which is level with that of the church. It is like entering a grotto. What a subject of regret, that an intelligent architect should yield to the absurd caprices of others! The whole length of the choir is but 60 feet.

Among the most valuable things in this church is the tabernacle, built by Giovanni d' Herrera, like a small circular temple, formed by eight Corinthian columns, of red jasper, with statues and other riches in gold and gems, worked by Giacomo Trezo, a Milanese, and celebrated

goldsmith. It is a pity that this beautiful morceau, as well as all the other ornaments of the altar, are not seen from a sufficient distance; there is a want of light, and the work is too minute.

The sepulchres of Charles V. and Philip II., with their respective families, are also magnificent. The presbytery is raised on a number of steps, and forms another superior church, which has no relation with the first, and takes much from the design.

Between the church and the ante-sacristy, is the magnificent staircase which leads to the Pantheon. I know not why this title has been given to the sepulchre of the kings of Spain. The staircase has fifty-nine steps, with a landing in the centre, where there is a view of Doric columns supporting an open pediment, to receive the arms of Spain. At the sides are two bronze statues, one of Human Nature, stripping herself of the illusions of the crown and sceptre, *Natura occidit*; the other of Hope, *exaltat spes*. The whole of the staircase and partitions are of marble and metal. In the two inferior landings are two doors, one leads to the vault where are the Infants and Infantas, and those queens who had no issue; the other to the sepulchral chamber of the kings, which is circular, 36 feet diameter, 38 high, encrusted with various coloured marbles, between gilt metals, ornamented in the interior with sixteen double Corinthian pilasters, on pedestals. Between these pilasters, which form a sort of octagon, are the niches with the urns, amounting to twenty-six; that is, four in each of the six sides, and two over the door; opposite to which is the altar of the Resurrection, rich in stone, metals, and sculptures. The whole building is really sepulchral, from its want of light. The architect of this Pantheon was not Giambatista Crescenzi, a Roman, who only added the little light it has. It was one Frataccio, who endeavoured to make it rich, without

any regard to beauty. The whole of this work may be considered a specimen of the reigns of Philip IV. and Charles II.

Among the other cloisters attached to the monastery is that of the Evangelists, with two orders of arches; the inferior of Doric columns, attached at the base, and the superior of Ionic: there are eighty-eight arches, crowned by a balustrade, with globes on the pinnacles. In the centre is a small isolated octangular temple, covered with a cupola, with four arches and four landings, ornamented with Doric columns; between which are four niches, with the four Evangelists, which has given the name to the cloister: over the entablature runs a balustrade. The exterior is of the same granite, but the interior of the little temple is of jasper. From each of the four landings in the basement rises a fountain, which flows into a vase of marble, surrounded by a balustrade. The rest of the cloister is divided into beautiful parterres. This temple, which is 30 feet in diameter, and equal in height to the façade of the cloister, is, however, crowded, and badly placed.

The college, the seminary, the royal palace, comprehend the rest of the building. The whole is copiously ornamented, particularly with paintings, from the best masters of Italy, Flanders, Spain, and Germany. There is also a collection of the best works of Da Vinci, Michael Angelo, Raffaello, Corregio, Rubens, and Titian, with a variety by other celebrated painters. Indeed, it would be difficult to find so valuable a collection elsewhere.

The adjacent buildings are worthy of this august pile. Attached to the monastery, by an arched way, is an edifice called the Campagna, which has two galleries, one with Doric, the other Ionic columns, each 100 feet long and 20 wide. It was built by Francesco de Mora, successor to Giovanni d' Herrera. The cloister annexed to it is entirely surrounded with Tuscan pilasters and arches.

Here are the hospitals, granaries, pantries, and various offices. Here are also gardens, which appear hanging, being on the acclivity of a hill, the ascent to which is by steps curiously placed at various distances. At every step some new beauty attracts,—fields, bowers, flowers, fountains, niches, and rustic seats. The garden on the south side of the monastery is 8000 feet in circuit.

Adjoining to the eastern and northern façades is a spacious gallery, or esplanade, surrounded by a parapet; the entrances being similar to those of the edifice.

Here are the offices, the quarters for the guards, the riding-school, the aqueducts, &c. It is to be regretted that the distant hills are without trees, — a defect common in Spain, and which could be easily remedied.

Beyond these outer buildings is the lovely Fresneda, to the east of the Escorial, half a league from the monastery. This villa, entirely surrounded by a wall, contains courts with Tuscan columns, gardens, meadows, fountains, trees of every kind, and especially the ash, which has given it the denomination of Fresneda; lakes, with small islands; supper-rooms, fisheries, meadows, bowers, and rivulets. Here is also a church by the famed Francesca de Mora, the whole of wrought stone, and, although unornamented, is magnificent in its proportions.

In 1773, a number of other works, both public and private, were set on foot, and carried on with great activity, both for convenience and pleasure,—streets, houses, squares, theatres, palaces for the Infants Don Antonio and Don Gabriele; the whole designed by the Signor Villaneuva, architect to the Escorial. The interior of these works is well arranged; and the exterior corresponds with the ancient structure. The whole has a grave appearance; nothing light is allowed. A spacious road leads to Madrid, but it is destitute of trees, which it is worthy of, as well as that of Aranjuez.

From the time of Philip II., all his successors have

made some additions to this superb edifice, which, like the others, contain great beauties, with many defects.

Philip II. passed much of the latter part of his life in retirement within this edifice, and but little more was required to give him the appellation of a saint. The archbishop of Toledo composed a eulogium on his virtues, in heroic verse, and also attributed to him miracles; in fact, few saints can boast of more than are ascribed to him.

Notwithstanding the order of chronology, we must continue our description of the buildings of Spain.

GIAMBATISTA MONEGRO,

A sculptor and architect of Toledo, a pupil of Berruguete. He studied at Rome; and, by order of Philip II., made six statues for the portico of the Escorial. To him are also attributed the architecture and sculpture of the Evangelists, which are in the gardens of the cloister of the aforesaid edifice. Palomino says he died in 1590, although in 1600 he built the chapel of the Sacrament at Toledo; confounding him with Giambatista di Toledo, first Architect of the Escorial.

GIOVANNI D' HERRERA

(Died 1597,)

Was born at Movellar, in the Asturias, and was a disciple of Giambatista di Toledo, and his successor in the royal fabric of the Escorial. He was nominated the royal architect, and cavalier of San Giacomo.

He gave designs for the church, of the order of San Giacomo, near to Veles, not far from Cuenca; which, although destitute of ornament, is consistent and of good proportion:

At Madrid, he erected the bridge of Segovia, in the same massive and grave character with the rest: it has nine arches, with corresponding divisions. The whole is of granite.

Herrera was also the first architect of the royal pleasure-house at Aranjuez. It was began under Philip II., was continually embellished by the other Catholic monarchs, and furnished with every thing convenient and sumptuous by Charles III. In the centre of the gardens, and in the most delightful situation, rises the palace, with its four beautiful fronts.

The original plan was a square, with a court in the centre. At various times there have been added two flanks, which run in a right line with the side fronting the square, and from these flanks project two large wings. These were finished in terraces, each of which has three porticoes under them, from whence continues a series of fluted pilasters, which form the entrance.

The body of the building has a decoration in the centre, which, in the lower part, has five arches, forming a portico, then seven windows; over the rest of the edifice there rise pyramidically seven others, with an attic, ornamented with sculpture, and crowned with a circular pediment, flanked with balustrades, and terminated by three statues. The order of the first story is Tuscan; that of the second is Doric, with a plain frieze; these two orders are carried throughout the edifice. The third, in the centre decoration, is Ionic; the fourth, in the attic, is Corinthian. The wings have also in their centre a decorated attic, which harmonises well with the principal part, and the two cupolas at the flanks. The whole of the edifice is occupied by two stories, a ground-floor and a

state one; the centre part only has three stories. The windows of the first floor are inserted in arches, which have a very fine effect. The upper ones are ornamented with triangular and circular pediments alternately; the others have small cornices. In the fronts of the wings the pilasters are double. The pedestals under each pilaster spoil the effect. Above the whole runs a balustrade, with balls.

The interior is magnificently distributed, ornamented with porcelain, other rarities, and with pictures by Gior-dino, and the sublime Mengs.

This royal house is preceded by an elliptical piazza, entirely covered with verdure, from whence proceed walks planted with trees, one of which leads direct to Toledo, across piazzas of circular and various other forms, exhibiting on each side beauties of every description. Others lead to woods, gardens, and the Tagus; and not far from thence is a circular piazza, from whence are seen ten verdant walks.

At the back of the palace are parterres, fountains of every sort, gardens, lakes, fisheries, sculptures, and many detached buildings. From this part also are a variety of walks, planted with trees, extending many miles; and although in strait lines, are diversified by different piazzas, elegant country houses, small temples, porticoes, supper-rooms, gates to embark on the river, on which are bridges and islands. In the evening these walks are illuminated, and exhibit, at one view, numberless beautiful vistas. It is perfect enchantment: plains, hills, and valleys, rivers winding amidst cultivated fields,—a continual rivalry between art and nature. This is the most delightful spot in Spain. The greater part of the sculpture is by Algardi. The beauties of art are here profusely scattered; and the whole have been exhibited to the public by means of the superb drawings by Don Dominico d' Aguirre, captain

of infantry and engineers, and engraven by the most able artists; since which, there has been published a large volume of all the royal seats at Aranjuez, accompanied with ten of the finest views. It is to be hoped that the whole will be added.

ANTONIO DEL REY,

A disciple of Giovanni d' Herrera, was appointed to construct the college of Valenza, towards the close of this century, by order of the archbishop, Giovanni di Rivera, patriarch of Antioch. The college is therefore called "del Patriarcha," or "del Corpus Christi." The church is decorated with Corinthian pilasters, 125 feet long, 55 wide at the transepts, and 30 in the body. The height is in good proportion, as is the whole. The great altar has six Corinthian jasper columns, and is enriched with sculpture and painting. It has a fine cupola.

The college has a court, ornamented at the lower story with Doric columns, on pedestals; and above, Ionic, with balustrades without pedestals. In the centre is a fountain, with an antique statue of Ceres. The internal entablature is crowned with a balustrade. There are eighty-six small and large columns; they belonged to the duke of Pastrana; some were from Alicante, and some from Carthagen; originally, perhaps, from Italy. The staircase is magnificent.

FRANCESCO DE MORA,

THE successor of Giovanni d' Herrera in the Escorial, where he built a church, in the villa at the foot of the hill. It is entirely of wrought stone, and, although destitute of ornaments, has a grandeur which cannot fail to please.

At Madrid, he built the palace of de Los Consejos, the most superb edifice in that capital. Instead of having one large door in the centre of the façade, there are two in the flanks, with Doric columns; over which are windows, with pediments. He also improved the cloister of the convent of San Filippo il Reale, began in 1600, from a design of Andrea di Nantes. It is of granite, with two orders of porticoes, each with twenty-eight arches, supported by columns. In the centre is a marble fountain, which corresponds well with the whole.

GIOVANNI GOMEZ DE MORA,

ABOUT 1620, built the church and college of the Jesuits, at Alcala, a magnificent and well-proportioned edifice. The façade of the church is of granite, of two orders; one with pilasters, the other with Doric columns.

The great square of Madrid was built after his designs, in which the size and uniformity of the buildings are admirable. The royal house, called the Panaderia, has a portico of pilasters, with twenty-four Doric granite columns.

Mora also built the church and convent of the Franciscans, in Madrid, by order of Philip III., but it merits little praise.

To him is also attributed the royal convent of the Augustins, of Madrid; the interior of which was at first Doric, and afterwards converted into the Ionic by Ventura Rodriguez, who has also made some fine ornaments in the parish church of San Sebastiano.

GASPARO ORDONES

BUILT the parochial church of San Martino, at Madrid, in 1600. The façade has no other ornaments than string courses, square recesses, and pediments: the effect is good. The interior is Doric, which would be well enough, if not disfigured by the large openings of the chapels. The ornaments of the altar are barbarous.

GIAMBATISTA CRESCENZI,

(Born 1595, died 1690,)

A Roman patrician, of the noble Crescenzi family, lately extinct. His thorough knowledge of the fine arts induced Paul V. to entrust him with the superintendence of the pontifical buildings and paintings. He went to Spain with the cardinal Zapata, and was employed in the Pantheon, and some other buildings of the Escorial, where he conducted himself with so much dignity, that Philip II

declared him gentleman of the rooms, marquis della Torre, and cavalier of San Giacomo.

At Madrid, where he died, he built the court prison, the façade of which forms the greatest ornament of the street of Antocha. Over the door, which is in the centre, is a decoration of two orders of six Doric columns, on pedestals: those at the side of the door are double. Above is a pyramidical attic, with a pediment, ornamented with statues and other sculptures. The windows are rustic, and the building is flanked by two towers, which rise above the roof in the form of pyramids.

The work is massive, but not sufficiently so for a prison.

The house near the palace of the Buon Ritiro, is thought to be designed by him; it is well arranged, and enriched with the finest pictures of Giordano.

MARTIN DE OLINDO

BUILT the parochial church of Liria, in the rich façade of which the inferior story has four Doric columns, on pedestals, with niches, statues, and bas-reliefs; the second order has the same number of fluted Corinthian columns. It has a fine effect. In the centre is a cloud of angels, with the Madonna. The third order has two fluted twisted columns, with a statue of San Michele in the centre. The sculpture is passable, and the whole is of cut stone.

The monastery of San Michele of Valenza, began by Cobarrubias, was finished by Martin d' Olindo, who in the choir, as in every other part, wished to imitate the Escorial.

The façade of the church has three stories ; the first, with six Doric columns, united at the extremities by statues : the second has Ionic columns ; in the centre, corresponding with the inferior gate, is the statue of San Michele, in a niche, ornamented with small Corinthian columns : the third has Corinthian columns, some strait, some twisted ; finally, a pediment, surmounted with the statues of the holy kings. It is all of hewn stone. The height is 65 feet. The interior of the church consists of plain pilasters only. It appears that this architect had no taste for architecture. The re-embellishments made afterwards are still worse. The pictures have some merit ; they are by the celebrated Giovanni Ribalta.*

SEBASTIANO SERLIO, A BOLOGNESE,

(Died 1552,)

Was a disciple of Baldassare Peruzzi,† and the first to measure and take designs of those ancient edifices, so elaborately described in the third book of his Architecture. In 1541 he went with his family to France, where he had been invited by the king, Francis I., who had previously given him many proofs of his generosity. Here he was employed in the Louvre, Fontainebleau, and le

* The lives of the Spanish architects, contained in this work, have been abridged from one compiled by Cavalier Don Niccola Azara, minister of Spain, resident at Rome.

† Vasari, tom. vi. p. 117.

Tournieille, and continued his treatise on Architecture. He preferred to his own design, for the court of the Louvre, that of the abbé di Clugny, and had the greatness of mind to advise its being executed. At the breaking out of the civil war, with its numerous train of evils, he retired to Lyons, where he lived most unhappily; became lame, and so poor, as to be reduced to sell some of his works and designs to Giacomo Strada. He afterwards retired to Fontainebleau, where he ended his days, esteemed by all for his learning in civil and military architecture, geometry, and perspective.

Serlio* is universally considered one of the most learned in architecture. He was devoted to Vitruvius, and shewed himself equally as well acquainted with theory as with practice. In the latter, he departed sometimes from the Vitruvian rules; his manner of profiling was hard, and his taste not excellent. He gave six diameters to his Tuscan columns; his cornice, in imitation of that of the Colosseum, is scarcely simple enough. To the Ionic he gave a base not sufficiently enriched. His Corinthian has only nine diameters, with too slender a capital. His Composite is in a still worse taste. He also coupled his columns. If the superb Malvezzi, at Bologna, is his design, as some pretend, the cornice might have been spared in each of the three orders, and that at the top only left.

* He published a work, entitled "*Regole Generali di Architettura di Sebastiano Serlio, sopra le cinque maniere de gli edifici, cioe Toscano, Dorico, Ionico, Corinthio, e Composito, con gli Essempi dell' Antichita che per la maggior parte concordano con la dottrina di Vitruvio.*"

JEAN GOUGEON AND PIERRE LESCOT

WERE both Parisians; flourished in the time of Francis I. and Henry II., and worked together in various edifices, especially at the Old Louvre and the Fountain of the Innocents.

Gougeon was so great a sculptor, that he has been called the Corregio of sculpture: his style was noble, majestic, and simple, and if not always correct, was at least always graceful. The Fountain of the Innocents is a masterpiece of sculpture; but the architecture is bad. The idea of a square tower, with windows between the pilasters, is certainly not one for a fountain. The situation, too, is very improper.

Gougeon built the palace of Carnavaler, and the illustrious Mansard, who finished it, suggested some of the plans. In the court is a Composite order, with a very rich frieze of figures of children amidst flowers; but, although well in relief, it looks confused at a distance.

A species of tribune, supported by gigantic caryatides, the work of this artist, is much esteemed. It is in the hall of the Hundred Swiss, at the Louvre.*

* Vie des Fameux Architectes, &c. par M. D'Argenville. Jean Gougeon, about 1550, undertook, in conjunction with J. Martin, to translate Vitruvius, for which he made many designs. Our artist was also skilled in the striking of medals.

FRANCESCA PRIMATICCIO, A BOLOGNESE,

(Born 1490, died 1570.)

HE commenced painting under Innocenza da Imola and Bagnacavallo, and, finally, under Giulio Romano,—all of the school of Raphael. He was called to France by Francis I.

Primaticcio was the first to introduce a good taste in painting and stuccoes, and also to extend, in some degree, the limits of good architecture. In 1540, he was sent, by the last named king, to Italy, to make purchases of antiques, and a number of figures which were cast in bronze, and collected at Fontainebleau. Besides the number of embellishments in that delightful castle, he gave a plan also for the palace Meudon, and a design for the sepulchre of Francis I. This sepulchre is like a small marble house. On a sub-basement, ornamented with bas-reliefs, a number of arches surround a species of tomb, supported by the figures of the king and queen. The taste of those times, on such subjects, was weak and trifling. Primaticcio was rewarded with the rich abbey of St. Martin di Troyes, and declared commissary-general of the royal buildings throughout the kingdom. Loaded with honour and riches, he was regarded as one of the first lords of the court, and all artists sought his protection, of which he was extremely liberal. Nicola da Modena, a painter and architect, practised in France under Primaticcio.

PHILIBERT DE LORME

(Died 1577,)

WAS born at Lyons, at the beginning of the 16th century, and at fourteen years of age went to Italy to study the antique. Marcello Cervino, afterwards pope Marcellus II., who had a great taste for the fine arts, patronised him. With a mind highly enriched, he returned to his own country in 1536, and exerted all his industry to strip architecture of her Gothic dress, and clothe her in that of ancient Greece. On going to Paris, for the cardinal du Belley, his merit was soon discovered by the king, Henry II., and his successors. He built a staircase at Fontainebleau, and made the designs for the castles of Sainte Maur, d'Anet, or Meudon, and rebuilt a number of royal houses. Queen Catherine di Medicis employed him to build the palace of the Thuilleries; a truly royal edifice, on which Philibert de Lorme displayed his most magnificent ideas. The ground floor is of fluted Ionic columns, singularly girded, on account of the length of the shaft, by five bands, whimsically sculptured. The pedestal on which they stand is continued, and esteemed a perfect model. When this palace was rapidly advancing, the queen on a sudden put a stop to its continuation, in consequence of some unfavourable astrological predictions, which were then much in fashion, and with which she was infatuated. Instead, therefore, of finishing this noble palace, she had another commenced by Giovanni Bulan, near St. Eustache, in a very bad taste, called l'Hôtel de Soissons. It is now demolished; and on the same site is the Halle au Blé, with two stair-

cases, so that those who are ascending avoid those who are descending.* The column, which formed the famous observatory of Catherine di Medicis, and her astrologer, Count Ruggeri, is attached to this, and has a very bad effect.

Philibert de Lorme was elected almoner and counsellor of the king, and enriched with a number of abbeyes. His taste for profile was poor and barren; and his Corinthian bases, with three torii, extravagant. He asserted that he saw it at Rome in the Pantheon; but he was not more correct in his observations on the fourth order of the Colosseum, which appeared to him Composite. He has left a treatise on the manner of building well at a small expense, besides ten books on architecture. He was the first who wrote on the cutting of stone, and he has treated the subject in a very obscure and confused manner.†

* The dome is 120 feet in diameter, and the column, which is of the Doric order, is 100 feet high.

† Dupeyrat, *Antiquités de la Chapelle du Roi*. *Histoire Littéraire de Lyon*, par le P. de Colonia. *Vie des Fameux Architectes*, par M. D'Argenville.

END OF THE FIRST VOLUME.

LONDON :

PRINTED BY J. MOYES, BOUVERIE STREET.

THE LIVES
OF
CELEBRATED ARCHITECTS,
ANCIENT AND MODERN.

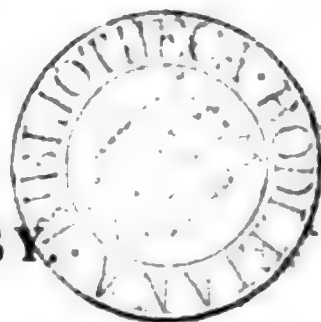
LONDON: PRINTED BY J. MOVES, BOUVERIE STREET.

THE LIVES
OF
CELEBRATED ARCHITECTS,
ANCIENT AND MODERN:

WITH
HISTORICAL AND CRITICAL OBSERVATIONS ON THEIR
WORKS, AND ON THE PRINCIPLES OF THE ART.

BY
FRANCESCO MILIZIA.

Translated from the Italian
By MRS. EDWARD CRESY.



WITH NOTES AND ADDITIONAL LIVES.

IN TWO VOLUMES.

VOL. II.

LONDON:
PRINTED FOR J. TAYLOR, ARCHITECTURAL LIBRARY,
HIGH HOLBORN.
1826.

OF THE
MODERN ARCHITECTS.

BOOK III. (*Continued.*)

OF THE ARCHITECTS FROM THE RE-ESTABLISHMENT OF
ARCHITECTURE IN THE FIFTEENTH CENTURY TO THE
EIGHTEENTH CENTURY.

CHAP. III.

OF THE ARCHITECTS OF THE SIXTEENTH
CENTURY.

GALEAZZO ALESSI, OF PERUGIA,

(Born 1500, died 1572,)

SHEWED an inclination for mathematics and literature at a very early age, and afterwards studied drawing for civil and military architecture, under the direction of Giambatista Caporali, a Perugian architect and painter, who translated and commented on Vitruvius. Finally, in order to acquire a perfect knowledge on those subjects, he went to Rome, where he became the friend of Michael Angelo.

He completed the fortress of Perugia, which was began by Sangallo, built an apartment in it for the governor of the castle, and erected a number of palaces, which are the

finest in that city. Genoa is much indebted to this architect, where he resided a number of years, occupied in various edifices, laying out streets, and restoring the walls of the city. On the Carignano Hill he built the magnificent church of the Madonna.* The plan is a square,† with a cupola in the centre, resting on four piers. At each of the four angles of the church is a smaller cupola. The plan of the whole is divided into three naves, and at the extremity of the centre one is the circular choir. The façade has a curved flight of steps; and level with the landing is a basement, on which is an order of Corinthian pilasters, at equal distances from each other. The projections in the centre and at the extremities are objectionable. The door is too plain, the windows are badly formed, and have clumsy and unmeaning ornaments around them. In the centre is a triangular pediment, and a semicircular window within it. Over the entablature is an attic, with a balustrade on each side; at the angles are two bell towers, not well arranged; and in the centre rises the cupola, the drum of which is surrounded by Corinthian pilasters: between the latter are alternately placed square recesses, with architraves, and semicircular arches resting on imposts, which certainly are not properly placed in a circular building.

* This parish and collegiate church was founded by one of the Sauli family in 1481, and commenced in 1552. The interior is decorated with an order of fluted Corinthian pilasters, supporting an entablature, the whole height of which, from the pavement, is 51 feet: on this order rests a vaulted ceiling. Against each of the four piers that support the dome is placed a statue, two of which, viz. St. Sebastian, and that of Alexander Sauli, are by the celebrated Puget. The other two, viz. St. John the Baptist and St. Bartholomew, are by a less skilful master. The altar is decorated with bronze bas-reliefs, by Soldani and the famous Fiamingo. There are many pictures around the walls, by Carlo Maratti, Guercino, &c.

† *Les Plans et Elevations des plus beaux Palais et Edifices de la Ville de Gènes, levé et dessiné par le célèbre P. P. Rubens.*

Above this is a balustrade, and over the dome another, from which rises the lantern, covered by a smaller dome, at the top of which is a pyramid, supported by a species of tripod; the whole is terminated by a ball and cross. He repaired, restored, and embellished the metropolitan church, and made the designs for the tribune, choir, and cupola. But his abilities were most conspicuous in the port or harbour. He opened a large gate, flanked by rustic columns; adorned the port with an ample Doric portico, ingeniously defended by balustrades. This work protects the city within and without, having a spacious square for the military in the interior. He extended the mole more than 600 paces into the sea, forming the foundation by throwing in immense masses of stone. He said, that if the republic wished to extend the mole further, it would cost more than thirteen hundred crowns for every foot.

The gate of the old mole is also the work of the celebrated Galeazzo. This edifice, which comprehends a commodious guard-house, is decorated, towards the city, with a fine front, in a right line, composed of three arches and four pilasters of beautiful Doric, well executed in the stone of Finale. It is not many years since this part was repaired, and stripped of a number of those deformities with which the ignorance and depraved taste of preceding years had disfigured it. The exterior front is semi-circular, ornamented with rough Doric columns, with niches between, and an elegant inscription over the door. Above this order, and in the two lateral bastions, are embrasures for the defence of the haven and mole.

This exterior, though more showy, is, perhaps, less correct than the interior. The scarp of the bastion, on the flank of which rests the rustic colonnade, is too much curved on the plan, which causes the entablature to have a very singular effect in the centre, not altogether pleasing. We cannot, either, approve of the rustic columns, the form of which is lost in the irregularity of the contour. The

proportions, however, are graceful; the mouldings sufficiently massive for the general character, without the least approach to heaviness.

Besides the buildings already described, Galeazzo Alessi erected various others, which formed the principal ornaments of the city and its environs. The Palazzo Salvago, afterwards Spinola, now Serra, in the Strada Nuova; that of d'Imperiali Lercari, of Spinola Arquata, of Saoli and Aderno, of Palavicino and Centurione; all in Strada Nuova. The two Lomellini, near the public baths; that of the perpetual senator, Pietro Francesco Grimaldi, near the church of San Luca.

In the Borgo of San Vincenzo, Alessi built a palace for the Signori Grimaldi, now in the possession of the Signori Saoli, which is so situated, that the principal part of it is not seen in any point of view from the street. The façade has a terrace above,* and two elevated pavilions at the extremities, adorned with elegant Ionic pilasters; within this is the court, three sides of which have an internal loggia, enclosed by Doric columns, supporting a broken entablature, with arches connecting them at each alternate

* This palace is situated in the city of Genoa, near the Porta Romana. The entrance is through a court-yard, about 59 feet square, surrounded on three sides, as described above; from thence you pass to a hall, about 26 feet square; beyond which is a saloon, 48 feet long and 30 feet wide, with its windows towards the garden, or south front. Seven other rooms, with the stairs, complete the ground plan. Above, a similar arrangement is repeated, with an open loggia, 48 feet by 26 feet, over the hall and its two side rooms. The elevation towards the street is very peculiar and busy, and much in Palladio's style. The upper entablature has an enriched frieze and a very beautiful cornice, which runs round the building. The south, or garden front, is to be admired for its chaste and elegant proportions. This palace is constructed of brick, and covered with a stucco, so fine that it may be taken for marble. The decorations throughout are remarkably well worked. The height of the lower order is 26 feet 8 inches, the stylobate over 4 feet 8 inches, and the order above 29 feet high.

intercolumniation. Above this, and between the arches, under the entablature, are introduced small mouldings, enclosing an oval niche, which contains a bust. Above the lower order a terrace is formed, except on the side of the front towards the street, where rises the body of the palace: in the centre is repeated the last mentioned arrangements of the columns, with three large arcades, and two smaller intervals, with architraves, supported by Ionic columns. The eye is presented on entering with a beautiful entrance hall, decorated with a corresponding order. In the partitions, octangular compartments, filled with sculptured roses, adorn the soffit. From the under mentioned portico a flight of steps, of three divisions, leads to the loggia, which, united to the rest of the work, forms a magnificent coup-d'œil. The loggia conducts into an ample saloon, from which there is access to other convenient apartments.

The façade towards the gardens, exposed to the south, varies in its decorations, although the principal proportions, with regard to the height, are the same. A coupled Doric pilastrade, with archivolts resting on imposts, form the first story, and a beautiful fluted Corinthian the second.

This work has some defects in its detail. The immense number of arched intercolumniations, and arches cutting each other, produces a want of unity. The solidity above appears too great for the lower story to support, the latter having too many voids. The ornaments here, as well as in the superior order, and in the entrance hall, are, perhaps, too crowded, not allowing the eye that repose which is so agreeable.

This building has been much injured. At a very early period it was stripped of a noble bath on the ground floor, considered a miraculous piece of work by Vasari and Soprani, who deplored its destruction; it is now incomplete, and its simple form only remains; beautiful indeed,

though deprived of all those ornaments and jets d'eaux which once adorned it, and were so much admired. The superior story has been for some years used as a manufactory for crape; and in the elegant entrance hall are a number of stoves for the drying of silks, the smoke of which has entirely blackened it. A part of the loggia is enclosed for a magazine. The terraces, loggia, and principal façade, are falling to decay, from damp and neglect.

In the Borgo of San Pier d'Arena, among the number of buildings erected by Alessi, as the palace of the duke Spinola, that of the Brothers Giuseppe and Cristoforo Lercari, and the Grotto of the Signori Doria, the palace of the Signor Niccolo Grimaldo della Rocca, and that opposite the imperial palace, deserve to be particularly noticed:—the first for the convenient distribution of the apartments, the agreeable proportions of the saloon, and other rooms, and the elegant entrance hall, which precedes them. It is of an oblong rectangular figure, with an arched roof divided into coffers, containing roses, &c. The walls are decorated with the Corinthian order, supporting an elegant architrave, a frieze, adorned with foliage in arabesque, and cornice, with well-arranged modillions. Between one pilaster and the other are stately arches, which rise to the bottom of the architrave. The two semicircles, formed by the vaulted roof, at the extremities of the entrance hall, are enriched by two paintings, which are better executed than designed. In this palace, also, a superb bath has been destroyed, for the purpose of forming a closet; it was curiously obtained under the principal staircase, and ought to have been most carefully preserved, however useful the space might have been.

The second, that is, the Imperiali, is not less remarkable for the beauty of its situation, and convenient arrangements, than for the delightful villa on the hill adjacent, and the masterly architecture which adorns its principal

front. This façade is divided into three parts, the two extremities project beyond the centre. On a solid basement is elevated a Doric order of columns, which are doubled at the angles. The difficulty of setting out the metopes in the combination of double columns is here surmounted in such a masterly style, that the variation in their size is not in the least perceptible. The second order is a fluted Corinthian. The architrave, frieze, and cornice, are too much encumbered with ornaments, as are also the principal windows, and those of the middle story.

The ornaments and arrangements of the enclosure which separates the first piazza from the Villa palace, are by no means in unison with the façade just named. They are in a most capricious style, friezes, scrolls, cornices, twisted and distorted; flowers, small windows, leaves, festoons, and a thousand other absurdities, produce a confusion which fatigues both the eye and intellect. Fortunately they are not of the same solid materials as the façade, and, although built 200 years after it, are now in a ruinous state.

The villa, which rises by various levels at the back of the hill, and overlooks the road, from its various fountains and grotesque form, produces a theatrical effect. Alessi appears to have been desirous of giving a specimen of every species of architecture, to shew the variety and fertility of his own imagination.

Alessi built two other celebrated palaces in the neighbourhood of Genoa, one belonging to the Signori Pallavicini, above Zerbino, and the other in Albaro, for the Signori Giustiniani. A spacious square surrounds the first; in the middle of which, before the principal façade, are two fish-ponds, surrounded by balustrades of Finale stone; these also supply the gardens with water, which are well cultivated, and contain a grotto, of a beautiful form, the walls and vaulting of which are ornamented with mosaic,

containing jets d'eaux, which fall into rivulets, breaking amidst rocks, naturally and artificially disposed. Many other similar grottoes, adorned with caryatides and termini of marble, well designed, are continually met with in the neighbouring palaces and country seats; but ignorance and avarice have in a great measure destroyed them, and appropriated them to stables and other purposes. From this grotto two staircases lead to the piazza, where is a noble vestibule of fluted Doric pilasters, with a level ceiling, well set out and ornamented. The palace forms something less than a square, has a small double entrance in the centre, and contains many magnificent rooms. The façade, which rises on a stately rusticated basement, sufficiently spacious to contain the offices, has the first order of Ionic pilasters, with a beautiful entablature; the second order Corinthian, fluted. In the wings at the extremities there is an arcade, in bas-relief, producing but a bad effect, the pilasters being too far distant, and the intercolumniations too wide. Instead of a window to fill up the arch, there is, very improperly, an immense niche, with a statue, painted in *chiascuro*, of a colossal form, by no means according with the architecture. The first vestibule is ornamented with stuccoes, in an elegant style; the back has a simple and rustic decoration, but very pleasing.

The portico to these intermediate vestibules is adorned in the same taste as the first, as is also the staircase and the anti-hall.

The palace of Giustiniani, in Albaro, is of the most noble architecture: on plinths of large round stones is placed the first order of Doric columns, which, in the centre part, has three arches, opening to the view a beautiful vestibule, through which is the way to the portico, or hall, of the first story. Two windows, one on each side the door, afford sufficient light. Opposite to this, on the left hand, is the principal staircase, which, by three flights of convenient steps, leads to the upper story, and an anti-

hall, in the style of a gallery, with a covered terrace before it, in the decorations of which the architect has excelled. The roof is supported by double Ionic columns, and the two sides in every degree correspond. Above this cornice are arches; on the top of which, and level with the columns, are termini, with corbels of an elegant form, and well sculptured, supported by a second entablature, which runs round the whole interior. The vault is semicircular, and ornamented with beautiful octangular compartments, filled with roses, in alto-relievo. Three large niches correspond with the exterior arches: the two lateral ones have circular recesses, with statues on elegant pedestals; and in the centre one, in a right line, is the door of the great hall, variously ornamented. The whole palace is well laid out; the only thing wanting is a convenient private staircase; a defect common to all the buildings of that period: perhaps the habits and luxury of the age only required one vast story.

Without the city of Genoa, Alessi built a number of other noble palaces; at Bisignano, for the Grimaldi family; at San Pier d'Arena, for that of the Giustiniani; for the Doria princes, for the imperial family, and other nobles. He left besides a number of designs and models, which have been at various times executed by that rich nobility. Thus her edifices have obtained for Genoa the title of Superb. The narrowness of the streets unfortunately lessens, in a great degree, the general effect.

Alessi executed many works at Ferrara, with which, however, we are unacquainted. At Bologna he erected the great gate of the public palace, ornamented with a Doric order, having two columns at intervals, united by large arches. The metopes are all equal, and, although more than a fifth of the diameter of the columns, are not perfect squares. The frieze is higher than prescribed by Vignola and Palladio. In this palace he also erected a

chapel, very well arranged. He finished the palace of the Institute according to the design of Pellegrino Tibaldi, and made designs for the façade of San Petronio. At Milan he built the temple of San Vittore, the whimsical auditory del Cambio, and the façade of San Celso, and greatly distinguished himself in the magnificent Palace di Tommaso Marini, duke of Torre Nuova.

He made various designs for buildings in Naples and Sicily, France, Germany, and Flanders; and also for lakes, fountains, and baths, of very elegant and fanciful forms.

The fame of this artist encreased to such a degree, that the king of Portugal declared him a cavalier, and the king of Spain sent for him to execute some buildings, with which, however, we are unacquainted, and loading him with riches and honour, permitted him, after some time, to return to his own country.

On his return to Perugia, he was received by his fellow-citizens with the most flattering expressions of regard, was admitted into the Commercial College, and sent to pope Paul V. on a commission involving the public interest. On his return to his own country, he was requested, by the cardinal Odoardo Farnese, to give a design for the façade of the Gesu of Rome, but which, on account of being too expensive, was never executed.

For the duke della Corgna, he afterwards built a stately palace at Castiglione, on the Lake of Perugia; and for the cardinal, brother of the duke, he erected another, situated on a hill a few miles from the city. In conjunction with Giulio Danti, a Perugian architect, he was concerned in the church of the Madonna degli Angeli, above Assisi, which was built after the design of Vignola.

He sent a design for the monastery and church of the Escorial, in Spain, which was preferred to those of every architect in Europe, and was requested by that court

to execute it, but his age and indisposition prevented him. Alessi was learned, agreeable in conversation, and capable of negotiating the most important affairs. This family has produced a number of illustrious men.*

ANDREA VANONE, A LOMBARD,

REMOVED from his native country, Lancio, in the Comasco, to Genoa, where he built the palace of the doge; a stately structure, fortified with secret chains of iron. In a spacious square at Sarzana he excavated a large cistern, for the public convenience; and although many had presaged an unfortunate result, it completely succeeded. He was employed by the republic in fortifications and other works, and led a long and honourable life.

He had the appearance of a perfect Stoic, shut up within himself, and attaching no importance to exteriors; he was, however, a good friend, kind and generous, but destitute of those amiable manners which often supply the absence of the essential qualities, or render them more conspicuous.

* Vite de Architetti, Pittori, &c. Genovesi di Raffaello Soprani.

ROCCO PENNONE,

A Lombard architect. He enlarged the small palace, which, for a length of time, had been the residence of the doge of Genoa, by adding greatly to the building, extending it in the form of an oblong square. This, with the original and subsequent additions, now forms one almost entire. One side extends rather too much for the other, towards the west.

Where Pennone has given the greatest proofs of his ability is in the grand distribution of a vast portico, flanked by two courts, which, although differing in size, satisfy the eye, at one glance, by the most perfect symmetry. These courts are surrounded by two orders of galleries; the first supported by Doric, the second by Ionic columns; a small portion at the angles has an architrave, and the rest arched. The staircase, which leads from the portico to the state apartments, is spacious and convenient, except the immense length of the second flight, which contains forty-three steps; the first and third, opposite, are of a more consistent number. On ascending the first, a wide landing leads, on the right and left, to the other two flights; the right conducts to the armoury, and the left to the habitation of the doge and the halls of public audience, to which the gallery over the western courts forms a noble entrance. The saloon, used by the great council, is above the portico, and is 125 feet in height, and 54 feet in width. This hall, the seven windows of which are on the south side, at equal distances, commanding the square for the military, was at first covered with a soffit of wood, said to have been highly ornamented, and rich in sculpture and gilding. It was burnt by the falling of a bomb, in 1684, together with the

hall of the lesser council, on the north side. They were afterwards restored, and covered with a soffit, like a cone or pavilion, pitched very low, especially that of the great hall, which, from the pavement to the top of the soffit, is not above 48 feet high. There was a great want of ability evinced in covering these two halls with one pavilioned roof, on account of its prodigious span; the bad arrangement of the cross-beams and joints, which lessen by degrees, especially in the south wing, causes the opposite wall to incline nearly 9 inches from the perpendicular. In the decoration of these two halls, the noble Giustiniani family were particularly distinguished by their liberal donations. The professors who adorned it were, for the fresco paintings on the roof and walls, Il Franceschino, and for the other ornaments, Tommaso Aldobrandi, both Bolognese. In the small hall, Aldobrandi, perhaps to shew his knowledge of perspective, painted on the soffit a species of gallery, supported by columns of the Ionic order, and placed on a continued entablature of various fanciful forms. Domenico Parodi painted the Virtues, in chiaroscuro, on the walls; and the large paintings in oil are by the celebrated Solimene.

All these famous works were destroyed by a conflagration, Nov. 3, 1777. It was proposed to repair this disastrous occurrence, by covering the building with a roof over the wooden one, but the deputies preferred consulting Simone Cantoni, an architect, who made a design, which united a magnificent and elegant decoration, both externally and internally, with security from fire, by constructing the whole roof without wood; and to prevent the pressure of the vaults and arches, formed the walls of a sufficient thickness to support them, without iron ties, which are here acted upon by the atmosphere. There is a book of the designs of this work, with all the principal parts large, and a good description of all the mechanism, with a brief history of the preceding and important facts.

Within the palace is an entrance to two churches,—that of Sant' Ambrogio, of which a sufficient description has been given, and that of San Lorenzo Metropolitana. Of the latter we shall make brief mention:—It was built about 1260, in the then prevailing taste called Gothic, and is divided into three naves, supported by arches of black and white marble, on columns of good proportions, and a cylindrical form, of oriental marble, brought from Greece; the capitals are curious. Over the first arches is a sort of attic, above the last-mentioned columns, and in the centre of the arches, are other small columns and some pilasters, over which are other arches.

The small naves are not very light; the chapels of the right wing are almost even with the wall, those of the left are recessed.

That in which is preserved the ashes of San Giambatista, was despoiled, about fifteen years since, of a marble railing, sculptured in leaves, perfectly according with the rest of the work, to substitute in its place a balustrade, which, besides having a barbarous effect, and not combining with the rest, is of so singular and disagreeable a form, that the first sight causes a sensation of displeasure. It is, in fact, an assemblage of the greatest absurdities that were ever produced by the Borrominis or Guarinis.

The same folly has been committed in the chapel of the Holy Sacrament, which was decorated with beautiful pictures by Luca Cambiaso, a Genoese, and Giambatista Castello, of Bergamo, who also directed the architecture, in a style somewhat hard, but regular and elegant. To the stuccoed columns, at the sides of the altar, which support the entablature, and are continued all round with a proportionate pediment, there has been substituted, within six or seven years, an ornament at the back of marble.

The choir also of this church has been similarly injured, though in a less degree. Galeazzo Alessi raised the *cúpola*, of a rectangular figure, ornamented with compartments in

the interior, and with eight columns on the exterior, and left a design for the tribune or choir, decorated, according to his own style, with simplicity and solidity. After some years Rocco Pennone undertook to finish it; but neglecting the design of Galeazzo, he introduced a superabundance of clumsy ornaments, both in the vaulting and on the walls, which are faced with various marbles, niches, small columns, irregular ornaments, and other extravagancies, devoid of all taste or architectural beauty.

GUILLAUME FILANDRO

(Born 1505, died 1565,)

Was born of respectable parents at Chatillon, on the Seine. Giorgio d'Amagnac, bishop of Rhodes, and afterwards cardinal, delighted with the wit and learning of Filandro, took him with him to Italy, when the prelate went as ambassador to Venice. Filandro then studied architecture under Serlio. He was made a canon of Rhodes, where he became celebrated for his Commentaries on Vitruvius. He joined his eminent patron at Tolosa, and died there. Among his posthumous works are some treatises on the cutting and polishing of marbles, on the colours of stone, painting, and the composition of colours and shadowing.

PIRRO LIGORIO, A NEAPOLITAN,

(Died 1580,)

A nobleman of Seggio, of Porta Nuova. Under Paul IV. he was made architect of St. Peter's; but in consequence of his disputes with Michael Angelo, the pontiff, although himself a Neapolitan, deprived him of the charge. Pius IV. employed Ligorio to make a design for the sepulchre of Paul IV. The small palace in the Belvedere wood is said to be the work of this architect, as is also the Lancellotti palace, in the Piazza Navona, on the Cuccagna.

He was also a painter, and executed a number of works at Rome in chiaroscuro, and of a yellow colour, in imitation of metal. He was likewise engineer to Alphonso II. last duke of Ferrara, by whose order he repaired the city, which had been injured by the overflowing of the Po, where he died. His principal study was the antique; but his admeasurements are not to be relied on. His drawings are mostly in the library of the king of Sardinia.

GIACOMO BARROZZI DA VIGNOLA,

(Born 1507, died 1573,)

Was born at Vignola, in the Modena territory, where his father, Clementi Barrozzi, a Milanese gentleman, had retired with his mother, a German, in consequence of the civil discords at Milan.

When a youth, he studied painting at Bologna, but not succeeding, he turned his attention to perspective, and at length collected all the rules on that subject in a treatise, which is well known. He at the same time studied architecture; and perceiving that making drawings and studying Vitruvius were not the only requisites to form an architect, he repaired to Rome, and measured almost all the valuable remains of antiquity in that city. Hence was produced that treatise of his latter days on the five orders of Architecture, which is become the alphabet of architects. While following these studies, he resumed his pencil for his support, but received so little profit from it, that he became disgusted with painting, and undertook to make drawings for the use of the New Academy of Architecture, erected at Rome.

Il Primaticcio having arrived from France to collect antiquities, Vignola gave him a number of drawings of ancient monuments, and returned to France with him: he resided there two years, and made numerous plans for edifices, which, in consequence of the civil wars, were never executed. It has been said that the castle of Chambord was designed by Vignola, but this is an evident mistake. The edifice was erected by an architect of Blois, several years before Vignola was in France, and is a mixture of the Antique and Gothic.

On his return to Bologna, he made, for the façade of San Petronio, a design partaking of the Gothic and Greek; the better to assimilate it to the interior, it is of a single order, and without any minute ornaments. This design was preferred to many others, and received the commendations of Giulio Romano, and Cristoforo Lombardo, architect of the cathedral of Milan, notwithstanding the disgraceful means used by his enemies to bring it into disrepute.

At Minerbio, near Bologna, Vignola erected a magnificent palace for the count Isolani. At Bologna he built the house of Achille Bocchi, but was obliged to adopt the

taste of the proprietor; it is in a heavy style. In the façade of the bank, an opportunity was offered him to display his abilities. This building forms a sort of wing to San Petronio; and although the architect had to preserve the old portico, which was very low, two streets, and an immense number of small windows, which looked on to the square, he produced so beautiful and regular a fabric, that it appears cast in a mould. In the original design were two small towers, rising from the arches which cross the street; but for the omission of these the building would have been perfect. His most useful work in Bologna was the canal of Navilio, which he carried into the city from a distance of three miles. Not receiving an adequate reward, he withdrew to Piacenza, where he made a design for the ducal palace, and, after laying the foundations, left the execution to his son Giacinto.

There are a number of edifices in various parts of Italy by this architect, but the precise time of their erection is not known, as the churches of Mazzano di Sant' Oreste, della Madonna degli Angeli in Assisi, and the elegant chapel in the church of San Francesco at Perugia.

On his return a second time to Rome, Giorgio Vasari presented him to Julius III. This pontiff, who had known him at Bologna, when legate to that city, immediately appointed him his architect, gave him the direction of the waters of Trevi, and ordered him to decorate his villa,* without the Porta del Popolo, which was called after the name of the pope, and ornamented with several curious fountains. On the Via Flaminia, Vignola erected a

* The Villa di Papa Giulio is situated between the Ponte Molle and the Porta del Popolo, and was commenced in 1550. Vasari is said to have given the first design, but the general arrangement of the building is attributed to Michael Angelo. Vignola may have added some embellishments. Bartolommeo Ammanati made the fountain at the extremity of the first court; and Taddeo Zuccheri executed the paintings and arabesques which ornament the circular gallery.

small temple in the antique style, called Sant' Andrea di Ponte Molle. Its plan is a rectangle, and the interior ornamented with Corinthian pilasters, without either pedestals or cornice.

Opposite the door is the altar, somewhat recessed ; it has niches on each side. Over the architrave, which rests on the pilasters, are four square compartments, irregularly disposed ; above this attic is a small elliptical cupola. But, as if Vignola had repented of suppressing the cornice over the pilasters, he has placed one on the impost of the dome, sparing neither modillions nor dentels. Externally, this dome has, by way of support, three steps, in imitation of the Pantheon ; an example not deserving of imitation, as the solidity of the cupola can be preserved without these abutments. The façade has Corinthian pilasters, ranging with those of the interior. The door is simple ; the window on each side has a tolerably good effect, but the ornaments to the capitals are very exceptionable. The attic and cupola form a height almost double the façade ; this is injurious to the proportion. And here it will be asked, How a work, so generally praised, by a Vignola, and in imitation of the antique, can possess so many defects ? We answer, That it is easy to praise, when taking a mere coup-d'œil, but that architectural correctness is most difficult to attain.

For the Signori de' Monti, Vignola improved, as much as was in his power, the palace which afterwards became the property of the grand duke of Tuscany, and commonly called the Florentine palace. For the same nobleman he commenced another palace, opposite to that of the Borghese family, but it remained with little more than the foundations laid.

The cardinal Alessandro Farnese, was much attached to Vignola, and employed him in that part of the Farnese palace in which is the gallery painted by the Carracci. He also decorated a number of doors, windows, and rooms.

By order of the same cardinal, who was also vice-

chancellor. Vignola erected, at San Lorenzo and Damaso, the beautiful Corinthian door, in which the modillions, though ingeniously imagined, are offensive, because they represent the heads of beams, which cannot be so placed. This door, which has no connexion with the façade, shews the difference between the works of Bramante and those of Vignola. The large rustic gate which the latter made at Campo Vaccino, in the Farnesi gardens, is well proportioned and arranged; the attic above, with its lofty caryatides and broken pediment, is in a style so different, that it cannot be attributed to Vignola. The rustic work is consistent to its situation. The imposts are removed, that they might not interrupt the uniformity of the work; but placing the bases immediately upon so irregular a ground, without either plinth or steps, is not certainly to be imitated. The continual recurrence of the delicate ogee in the capitals, is also improper for a rustic gateway. The exterior of the Porta del Popolo, which is attributed by some to Michael Angelo, by others to Vignola, is by no means in a good style. The four marble columns are small, and their pedestals being too high, are made to look like mere fluted projections: the opening of the gate is narrow; the columns appear of no use, and the attic is too high, being more than a third of the order. The piers of the arch are too wide; the impost projects too much, and is continued uselessly between the columns. The archivolt wants elegance, and the termination of the attic consists of a number of parts, without any thing to unite them. The frieze is divided proportionately into triglyphs and metopes.

The cardinal Farnese, zealous for the Jesuits, whose institution his uncle, Paul III., had lately approved of, was desirous of constructing a magnificent church for them, and our architect was commissioned to make the designs. He divided it into a Latin cross, one end terminating in a semicircle. The length is 216 feet, the width

of the transept 104, and that of the great nave 115. The chapels are recessed, and some of them have altars, which please from their novelty. The foundations were laid in 1568, but Vignola only carried the edifice up to the cornice, the profile of which is elegant, and the distribution of the members pure and regular: the rest was completed, as we shall see hereafter, by Giacomo della Porta, who altered various parts, and made many innovations.

But neither this church, nor many others within and without Rome built by Barrozzi, are equal to the Caprarola Palace, the most beautiful and stately work of this architect. The cardinal Alessandro Farnese selected a solitary situation, about thirty miles from Rome, on the Viterbo side, in a mountainous and desolate situation. The edifice stands on the ridge of a hill surrounded by rocks, and in a species of defile: it forms an amphitheatre, which presents itself most agreeably to those who approach it, and commands a most enchanting view on all sides.

The offices and kitchens are well arranged to the right and left. The plan is pentagonal, flanked by five bastions, in imitation of a fortress. This mixture of civil and military architecture produces a very grand effect. The detail of the decorations is according to all the best rules of architecture, and the distribution of the plan is most excellent.

Besides a large gallery, and an ingenious staircase, which occupy one angle of the polygon, there is on each floor three large complete apartments, which are approached by means of a circular portico, carried round the interior of a circular court, in the centre of the edifice; and the building, though not of great extent, has every part so well distributed, that it contains a vast number of apartments and other conveniences. To the perfection of the architecture is added the beauty of painting, which

adorns every apartment. In the great halls are represented the most resplendent actions of the illustrious Farnesi. The greater number of the rooms have their names,—some are dedicated to Silence, others to Sleep, to Solitude, and the Virtues, which are there represented with their respective attributes.* The perspectives are all by Vignola himself, who succeeded well in this kind of painting, and confessed that the science of perspective had taught him that of building. When the famous M. Barbaro saw this palace, he said that its appearance was greater than its fame. After the death of Michael Angelo, Vignola was appointed architect to St. Peter's, and erected the two beautiful lateral cupolas.

The Baron Berardino Martirani being come from Spain, to collect designs for the stupendous fabric of the Escorial, and having collected twenty-two, among which were some by Galeazzo Alessi, Pellegrino Tibaldi, Andrea Palladio, from the Academy of Drawing at Florence, besides that by Vincenzo, Dante Perugino, which he did by order of the grand duke Cosimo Medici, and which was put into the hands of the king of Spain himself,—Il Martirani shewed them all to Vignola, who, with that exquisite discernment so peculiar to him, selected whatever was most elegant from each, and uniting his own ideas, produced so beautiful a whole, that Philip II. immediately decided on it, and invited Vignola to Spain to execute it; but his advanced age, and attachment to Rome, prevented him from undertaking the journey, and the design was not carried into effect.

Pope Gregory XIII. employed our architect to settle the

* The small palace at Caprarola is said to have been designed by Vignola. Plans and views of both are given by C. Percier and P. F. L. Fontaine, in their work, entitled, "*Choix des plus célèbres Maisons de Plaisance des Rome et de ses Environs.*"

difference between him and the grand duke concerning the confines of their estates near Citta di Castello. Vignola executed his commission with judgment and integrity. He had scarcely returned to Rome when he died, aged 66. His body was carried, with great funeral pomp, by the members of the Academy of Drawing to the Pantheon. "It was but just," says Aviler, "that the greatest admirer of ancient architecture should have his sepulchre in the most magnificent edifice of antiquity."

He was of an agreeable complexion; sincere, prompt to assist others, patient, and cheerful. Architecture is eternally obliged to him; he formed a system, and prescribed rules. Convenience, solidity, and all the mechanical parts, were well understood by him.

He was fertile in invention, elegant in his ornaments, and majestic in his arrangements. As he increased in experience, he improved in the correctness of his profiles. With the aid of a little philosophy, he would have corrected architecture of those abuses, which neither his cotemporaries nor the ancients had perceived. But the age of philosophy was not yet arrived. His book, therefore, which is the first usually put into the hands of youth, and, perhaps, the only one interesting to architects in their old age, like the breviary to a priest, has done more evil than good. Vignola, in order to render his rules more general, and more easy in practice, has now and then altered the finest proportions of antiquity. In the divisions of certain members, and in some of his mouldings, he rather inclines to harshness; and by making his pedestals too high, he takes from the importance of the column. There is no system more easy than that of Vignola, but this facility is procured at the expense of architecture herself. The model for his Doric was the theatre of Marcellus; but finding some of its mouldings not conformable to the proportion he had established, he made no difficulty in accommodating them

to his rule. He has taken other parts from various Doric edifices, and united them with those of the theatre of Marcellus.

GIORGIO VASARI D' AREZZO,

(Born 1516, died 1574.)

HE was a great painter and architect, and an intimate friend of Buonarroti, as well as of all the literati of his time. He built a great part of the palace for Julius III.,* which is without the Porta del Popolo, near to the Arco Scuro. The exterior parts of this edifice, taken separately, are not very correct, but, as a whole, the proportions are elegant. The number of deformities in the interior clearly shew that the architect was obliged to yield to the fancy of the person who employed him,—an instance not uncommon. It is now almost a ruin: and shall it be said that the barbarians alone have destroyed the magnificence of ancient Rome? Whichever way we turn, the beauties of three or four centuries ago are presented to us in ruins.

Vasari built a number of edifices in various places.† At Pisa, the palace and church of the cavaliers of Santo Stephano, and, at Pistoja, the beautiful cupola of the Madonna dell' Umilta, are his designs. At Florence, he

* For plans and views of the Villa di Papa Giulio, see Percier and P. F. L. Fontaine's work, before referred to.

† Vasari designed the decorations to the Isola Bella, in the Boboli gardens; a fish market at Florence, under the direction of Cosmo I.; he decorated the church of Santa Maria Novella with some beautiful altars; restored the ancient church della Pieve, at Arezzo, besides many others.

improved the form of the Old Palace, though not without some trouble; beautifying it with staircases, halls, and apartments, and with a corridor leading to the Pitti Palace. His best building, and the most elegant in Florence, is that of the Uffizj.* The façade has a portico, with openings alternately circular and level;—the centre opening supported by double insulated columns, and the others by large piers, with niches. Over the entablature of this portico, which is Doric, with a plain frieze, and dentels above the cornice, is a lofty attic; the windows are small. This idea evinces an improved taste. Maffei says, Book II. on the Amphitheatres, that the archivolts of the arches, on the basement of this edifice, are managed with so great skill, that, although the interior façade rests upon them, even an experienced eye cannot perceive any settlement, nor is this arrangement in any degree prejudicial to the firmness of the building; and, although another story has been added, containing an immense collection of busts, marble statues, &c., not a stone has moved from its original position. Vasari was of opinion that all archivolts, both ancient and modern, were fractured in the centre; he therefore took care to avoid this in his own work, by adopting the same plan as in the amphitheatre at Verona, where the key-stone is dove-tailed into the two lateral stones, which are so long and deep, that they extend to the pilasters, and entirely through the walls.

That which has rendered Vasari so justly renowned, is his “Lives of the Artists.” But for this work, we should still have been ignorant of the history of the arts, and of

* Cosmo I. commenced this building in 1561, and, after Vasari's death, it was completed by Alfonzo Parigi. The first story of this palace contains the Magliabecchi library. The next floor is the celebrated museum. See “Architecture Toscane, par A. Grandjean de Montigny et A. Famin, architectes.”

some of the most celebrated artists. It was illustrated with a number of notes by M. Bottari; who would have done better if, instead of the three large volumes in quarto, he had compressed all that was useful into a moderate-sized volume, and consigned to oblivion opinions, which were the defects of the age. In the last edition at Leghorn this objection is removed.

This work of Vasari is, however, most valuable, on account of its history of the arts. From this example many authors, especially in Italy, have written Lives, and done little more than praise the artists and their works. The best way of eulogising clever men is to make their works known. When we see what they have produced most remarkable, we may then delineate their character, follow them through their studies, examine the paths they have trod; by this means we not only attain fame for ourselves, but the history of their virtues becomes a useful lesson to the reader. Another quality attached to this work of Vasari is, its being written with a clearness of style, devoid of pedantry and affectation, with a vivacity of expression, and a great propriety in the similitudes. To write in this manner, it is necessary to possess a knowledge of art, and a perfect acquaintance with the subject.

Vasari was also the author of a useful and excellent work, entitled “ *Ragionamento su le Invenzioni.*”

PIERRE DE WIT, A FLEMING,
CALLED IL CANDIDO,

WAS born at Burgos, in Flanders, and went to Italy to study drawing. He was called Il Candido, from his surname having that signification in the Flemish language. He belonged to the school of Vasari at Tuscany, and, in drawing and colouring, soon surpassed his master; — still, however, preserving a degree of that hardness, peculiar to the Florentine school.

Il Candido was not only a good painter, but also an architect and sculptor. The duke, Albert V., of Bavaria, sent for him to Monaco; and his nephew, the duke Maximilian, first elector, employed him in the great electoral palace. This is an immense building, which, according to the custom of the age, had been hastily built by the elector, who was desirous of being himself the architect. It is, however, believed that Il Candido had the principal share in it; it is certain that the embellishment of the interior was entirely confided to him. The staircase is a masterpiece of architecture: it must, however, now be sought for, the approach to it having been changed.

Another excellent work by this architect is the mausoleum of the emperor Lodovico, *il Bavaro*, built by him in the church of the Madonna; it is worthy of being in St. Peter's. At the four angles of this sepulchre are four gigantic statues, representing soldiers, with large lances, and various imperial insignia; other statues, in bronze, complete the design. The last-named church is one of those Gothic fabrics of the 15th century, which can only be called magnificent from their vastness, or beautiful from the embellishments. This temple, however, without any

ornament, is grand, and inspires respect. In the centre of the white marble pavement is the print of a human foot. Standing at this point, not a window is visible, although there are a great many, as high as the side naves. This century, which was fruitful in anagrams, allegories, and such follies, produced also this and various other architectural whims.

DANESE CATANEO,

(Died 1573,)

A sculptor and architect of Massa di Carrara, a disciple and follower of Sansovino, sculptured the statue of the Apollo over the well in the centre of the court of the Zecca at Venice. It represents a young man, sitting on a globe, fixed on a golden rock, his head radiant; in the right hand are metal rods, and in the left a sceptre, at the top of which is an eye. A serpent, with his tail in his mouth, encircles the globe.

He also sculptured the sepulchre of Alessandro Contarini, a valiant Venetian general, now in the church of Sant' Antonio at Padova.

His greatest work is in Verona, in the church of Santa Anastasia, in memory of the celebrated Giano Fregoso. It is both altar and sepulchre, and yet so formed as to be neither one nor the other; four fluted Corinthian columns are placed on a pedestal, having an attic, and over their entablature, in the centre intercolumniation, is an arch, with its imposts extending behind the columns. In the centre of the arch is a smaller pedestal, with two half Corinthian columns at the sides, with a pedi-

ment above: on this tabernacle, which somewhat projects, is a statue of a naked Christ, which is well relieved by the stone which forms the recess. This is called the altar. In one of the lateral intercolumniations is the statue of Giano Fregoso, armed after the antique, but not in a style that ever was in use. Various other well-executed sculptures adorn this much admired composition.

At Venice, he built and sculptured the sepulchre of Andrea Badoaro, in the church of San Giovanni Evangelista. He was a descendant of the Participazj, and the author of "The Wars of the Galeazze."

The sepulchre of Leonardo Loredano, in the church of San Giovanni and Sant' Paolo, who in the war of Cambray sacrificed both children and property in the defence of his country, is also by this architect.

In Padova, where Cataneo died, he executed some sculpture for the Arca del Santo. He was also a poet, and author of an epic, called "L'Amor di Marsissa." This was merely wasting his time. His talents would have been great had he solely applied himself to the study of the fine arts.

GIROLAMO AND GIOVANNI GRAPIGLIA,

BOTH architects. Girolamo gave designs for the sepulchre of the Mocenighi, in the church of San Giovanni and Paolo in Venice, and also for that of the Loredano, last alluded to, in the vast chapel of the same church, in which is represented a view of three intercolumniations, of the Composite order, on a pedestal, with a pediment. In the centre intercolumniation, raised on three steps, is the statue of the doge, in a royal mantle, with a number

of other sculptures, enigmatically alluding to the disturbances of the time.

Giovanni was the architect of the church of San Pietro di Castello, in Venice, which was begun in 1621. Some persons discover a great resemblance between the architecture of Girolamo and that of Scamozzi.

ANDREA PALLADIO, OF VICENZA,

(Born 1518, died 1580,)

FROM his earliest years devoted himself to architecture, and, with a previous knowledge of literature, he applied to the study of Vitruvius and Alberti.

The celebrated Gian-Giorgio Trissino, his countryman, was his patron, and took him to Rome three times.

Palladio profited by these journeys, measuring and taking drawings of all the ancient edifices of Rome and its vicinity. Nothing can exceed the labour and diligence he used to understand the skilful arrangements so conspicuous in all the buildings of antiquity. He omitted not to examine any work, however ruinous, with the most scrupulous attention; nor was he satisfied unless he himself saw the foundations of these structures, which had been destroyed for so long a time. From the traces that remained of them, he, however, formed the plan of those edifices, which he so admirably constructed.

The first building attributed to Palladio, was re-modernising the palace del Trissino at Cricoli, at Villa Vicenza. In this work, nobleness of thought and parsimony are equally evident. This edifice was by Trissino himself, who was a great orator, a great poet, and extremely skilled in architecture. In this noble family

there is preserved the commencement of a treatise on Architecture, illustrated with various designs drawn with a pen.

At twenty-nine years of age, Palladio was employed in the great public palace of Udine, called the *castello*; the first architect of which was, it is said, Giovanni Fontana, of Vicenza, a sculptor, architect, and carver, and conjectured by some to have been the master of Palladio; an edifice which, had it been finished, would have been worthy of a monarch. At the same time he made a model and designs for encircling anew the *hall della Ragione*, at Vicenza, with porticoes; on which subject Guilio Romano was also consulted. This edifice, which cost Palladio a great deal of time, consists in an ample portico, surrounding the ancient Basilica, or Palace of Reason, on three sides. It is all of fine stone. The first floor is Doric, the second is Ionic, both ornamented with arches and columns, their entablatures being of the most exquisite symmetry. The Doric columns are placed on the pavement of the piazza, the plinth of their bases serving as steps to the portico. The columns of the second order are placed on pedestals. Over the entablature is a balustrade, with statues. The great excellence of this work, and the great difficulty, so well overcome by Palladio, consisted, in making the new agree with the old; the columns of the new exterior necessarily came in contact with the Gothic pilasters of the interior, requisite for its support: however he produced an elegant and well-proportioned effect.

The restraints which this great man was under in decorating this Gothic edifice, would not allow him to distribute the great intercolumniations more frequently, nor to remove the projections from the entablature, which, from the division of the Doric frieze, produce a disgusting irregularity. The arches are well turned, and especially those at the angles, which are smaller. If these arches were

double their height, and a little wider, what a much better effect would be produced ! The plinths of the small order are circular, and project but a very little ; but they do not accord well with those of a different height. It would have been better to have omitted the bases ; his practice and theory would then have agreed. The connecting of the pilasters of the small order with the columns of the large one, is bad ; for the columns being half incased in the wall, the projection of the impost is beyond the half of the diameter. Perhaps Palladio had not observed the sepulchre near to Terracina, in which the projecting of the Doric entablature is managed with more ingenuity. The contraction of the triglyphs is, however, well managed ; the metopes are made higher than they are wide ; but doubling them at the angles, to prevent an infringement on the bases and capitals, is not proper.

The Tiene palace, which Palladio built at Vicenza, in the street of Santo Stephano, although not finished, is a noble edifice, both on account of the convenient arrangement of the rooms, which are octangular at the four sides, and for the beautiful effect of the façade. The first story is rustic, the second Composite, — too great a contrast. The windows of the second story have rusticated Ionic columns. This singular arrangement was, perhaps, made in order to prevent too much discordance between the first and second story.

Near Malcontenta, on the river, he built a palace for Francesco Foscari, in the ground floor of which he laid out the office and servants' apartments, reserving the upper one exclusively for the use of the noble family. In front is a magnificent Ionic loggia, the ascent to which is by two majestic lateral staircases. The staircase, which is approached from this loggia, is in the form of a cross ; at the sides of which are the rooms. The novelty of the idea and the excellence of the design are equally admirable.

In Feltre, a city of Marca Trivigiana, Palladio built the

first story of the public palace, in rustic work, with five arches of noble symmetry. Some years afterwards, the second floor was finished by some inferior architect, and in a very disgraceful manner. At Bassano he erected the gate, called that of the Graces; consisting of one majestic rustic arch, with Doric columns at the sides, and adorned with a beautiful pediment. There is, however, no document to prove that either the first story of the palace at Feltre, nor the last-named gate, were by Palladio.

So many fine works carried the fame of Palladio also to Venice, where he took precedence of Sansovino, who was now getting in years. His first work there was the monastery of the Lateran Canons della Carita. The design was after that of an antique house. A beautiful Corinthian vestibule, or portico, formed the entrance to the church, with galleries above. The portico was 56 feet long, 40 wide, and 35 high to the lacunaræ, in the centre of which were large quadrangular holes to admit light. It was surrounded internally by a balustrade, which enclosed a noble terrace, corresponding with the second story. To the flank of the vestibule were galleries, with two ornamented tablini—a name given by the ancients to those places where they kept the images of their fathers,—one for the sacristy, the other for the chapter-house. The rooms were arranged at the sides, and a winding staircase, open in the centre, led to both stories. From the vestibule you approached the court, surrounded by porticoes and rooms. Then passing the public street, there were other porticoes forming a square, in the centre of which was to have been the refectory, kitchens, and other conveniences, with a delightful garden. Of this great fabric, the grand vestibule, the two tablini, the staircase, and a part of the adjacent court, were finished; but a fire destroyed a great part of it, leaving only one side of the first court, one tablino, and the winding staircase. This tablino, which was used as

the sacristy, is ornamented with columns and niches of extreme elegance, and is a complete work. The side of the court is divided into three orders; the first Doric, in the frieze of which there are no triglyphs, but a continuation of bulls' heads and patera, gracefully united with bands and festoons, like a continued metope. Palladio here concealed the triglyphs, because the floor answering to the frieze is not supported by beams, but by a vault. His knowledge was not matured, or he would have known that a frieze entirely composed of metopes was a vacuum incapable of supporting any thing, and consequently merely placed there for ornament. The second order is Ionic, the arches of which are not sufficiently light, when contrasted with those underneath. The third is Corinthian, with square windows. All the materials are admirably worked.

At the same time Palladio built a refectory for the monks of San Giorgio Maggiore. The vault, the entablature, the windows, and the door, give it a peculiar grace and majesty. He also made a beautiful portico, with two reservoirs, placed between the Corinthian columns. In front is an ample staircase, descending very conveniently to the cloister. The peristyle, near the gate of this monastery, is also his work. The first order, corresponding to the portico, is divided into arches, with double Ionic columns: the second consists of beautiful windows.

He afterwards built the church of San Giorgio Maggiore, with the façade opposite the little square of San Marco. The plan is a Latin cross, with three naves, elevated from the ground on seven steps. A semicircular vault covers the large nave; in the centre, from four arches, rises a majestic cupola of brick-work, with an exterior one of wood, covered with lead. Corinthian pilasters, with entablatures, support the arches which divide the lateral naves, and continue through the whole interior, intermixed with niches. The façade is adorned with a

Composite order on a pedestal, which runs entirely round, and is terminated by a proportionate pediment, under which are two half pediments, indicating the lateral naves. Unity and simplicity run throughout all the ornaments, and a majestic effect is the result. The marbles are so happily selected with regard to their colours, that there is a perfect harmony, similar to the Strozzi chapel in Sant' Andrea della Valle, at Rome. It is now common to incrust the churches with Sicilian jasper and other precious marbles, but the eye does not find sufficient repose by such a distribution of colours.

He made the façade for the Zoccolanti friars to the church of San Francesco della Vigna, built by Sansovino, who also made a design for the façade, but that by Palladio was preferred.

It is entirely of the Corinthian order. The basement is a continued pedestal, on which rises four columns, projecting a little more than half their diameter, about 40 feet high, and supporting an entablature with a pediment. In the centre intercolumniation is an arched door, with a semicircular window above, divided into three parts. In the lateral intercolumniations are two large niches. Over the door, in the middle intercolumniation, runs an entablature, level with a smaller Corinthian order, which serves to decorate the ends of the two ailes of the church; but this is omitted over the niches. The side ailes have two half pediments, as in San Giorgio Maggiore. The whole of this much-admired façade is of Istrian stone.

In consequence of the dreadful pestilence of 1576, the Venetian senate ordered the erection of a simple temple; and Palladio built the church of the Capuchins, called *Il Redentore*, the Redeemer, at Zuecca. It has one nave only, 92 feet long and 46 wide, with three chapels on each side, a cross tribune, covered with a majestic cupola, in the centre. Behind the tribune is the choir, with two

sacristies, one on each side, and two round campaniles with winding staircases.

The church is entirely Corinthian; and a smaller order of the same kind supports the arches of the chapels: the architrave runs through the intercolumniations round the temple. All the altars are of matchless beauty and simplicity, except the great altar, which is a deformity of the last century. The façade is a rich Composite, with an arched door, and a pediment above; over this pediment is part of an entablature of a half Corinthian order, which adorns the wings of the façade, and forms on both sides two half pediments, which fall against the entablature of the great pediment in the centre. These three churches are not certainly exempt from faults; that of the Redentore especially, which has an attic above the pediment, with ancient pinnacles. A spacious approach of sixteen steps gives it an air of great majesty.

Near to this is the church delle Zitelle, supposed to be the work of Palladio; the plan of which is a perfect square, with the angles cut off, which produces the appearance of an octagon. It is covered with a cupola, and this figure was adopted, in order that it might rest more securely. But there is no reason why the façade should have two orders. The first corresponds with that in the interior of the church. To him is also attributed the church of Santa Lucia. But neither the one nor the other can be Palladian; the character, the dimensions, the proportions, all contradict the assertion.

Palladio was employed at the ducal palace at Venice; and he would have done something still more noble to the hall of the great council, which had suffered from fire, had his wish of building a new edifice from the ground been complied with.

For the arrival of Henry III. in Venice, who had abandoned the crown of Portugal to wear that of France, Palladio erected a triumphal arch, resembling that of

Septimius Severus, and designed a loggia, with ten Corinthian columns and pilasters at the flanks.

The finest ornament devised by Palladio for Venice was the bridge of the Rialto, the design of which is to be seen in his books on architecture; but the unfortunate state of the times involving the republic in serious wars, it was not carried into effect.

Nor was his design for the stone bridge over the Brenta at Bassano ever executed; he, however, erected one of wood, in a very ingenious manner.

In the town of Maser, in the Travigiano, Palladio built the magnificent palace for Marc Antonio Barbaro, brother of the celebrated Monsignore Daniel, patriarch of Aquileja, and translator and commentator of Vitruvius. This palace has a hall in form of a cross, with galleries, rooms, and porticoes on each side. The area at the back part slopes like the side of a hill, from whence springs a fountain, which forms a small reservoir, and flows in various directions for the purposes of convenience and pleasure. The principal façade is Ionic, divided into three spaces. The angular capitals have two faces, and are like those at the temple of Fortuna Virilis, now Santa Maria Egiziaca, in Rome: this practice with regard to the angles of the capitals, was always observed by our architect. Opposite the great gate of the garden is a half-circular piazza; in the centre is a fountain, very similar to that made by order of Julius III. at his villa in Rome, without the Porta del Popolo. Near this palace is a round temple, about 35 feet in diameter; it has a portico in front, the ascent to which is by a large flight of steps. This portico has four Corinthian columns and two pilasters, forming five intercolumniations: at the two ends are two arches. The capitals are of terracotta, worked in olive leaves, and from the flowers of the abacus hang festoons, which form a beautiful ornament. In the centre intercolumniation is a door after the antique, which opens into the church. The interior cir-

cumference is divided into eight equal spaces by eight Corinthian columns. Between the four spaces in the centre are four circular arches in the walls; one for the entrance, the other three for altars. In the other four spaces are four beautifully ornamented tabernacles. A cupola of brick, with a lantern, encircled externally by steps, covers the whole church. Behind the great altar, which is opposite the door, are two small sacristies, with two winding staircases. This temple is a miniature model of the Pantheon at Rome, copied with all its beauties and defects, its arches on a circular plan, and interior cornices.

Palladio made the design for a casino, built by the Trissini on a hill at Meledo, in the country of Vicenza,—a design not calculated for a casino, but for a large house, with a variety of adjacent buildings; this fabric was never finished. He also built a noble palace at Montagnana for Francesco Pisani, a Venetian gentleman, with too contracted a door. We cannot ascertain what was the design sent by Palladio for the Escorial of Spain.

He made four designs for the façade of San Petronio of Bologna, which was begun in 1390 by Mastro Arduino, a sculptor and architect of Venice; one of three orders, two of a single Corinthian, with a pedestal under and attic above; the fourth is a mixture of Roman or Greek and Gothic: the latter predominates in the first order, and the second is an elegant Corinthian, with a pediment above. Neither of the designs proposed by Palladio for San Petronio is Gothic. One alone has internal vaults to lighten the weight over the arched order. In another, the pillars are in a bad taste, as they now remain. These designs are preserved in the library of the church, situated out of the great chapel. In the Ruini palace, now Ranuzzi, in Bologna, the north portico and façade are attributed to Palladio.

Palladio was sent for to Piedmont, where he laid out the ancient Parco Reale, now almost entirely destroyed.

He also went to Trento to rebuild a palace in that city, and did a great deal for the cathedral and pretorio at Brescia; they do not, however, appear like Palladian work. The public palace of the city is by Bramante.

The palace of the counts Valmarana, at Vicenza, is one of Palladio's most complete works. The façade has two orders of pilasters; each on a pedestal, which extends under the windows of the ground story: the larger pilasters are Composite, and comprise two stories; the smaller are Corinthian, and reach to the first story: each order has its peculiar entablature. Over the Composite is an attic with square windows, and statues above. It is evident that this combination of large and small pilasters, rising from the same level, and the inter-section of the lesser entablatures by the large pilasters, is not the result of a pure taste: still worse is the arrangement of the Corinthian pilasters, which at the two extremities do not rise above the level of the first floor.

In his native city, where Palladio resided with his wife and children, he built a very convenient house, externally decorated with the Ionic and Corinthian orders, with an attic above painted in fresco. There is not the least doubt of this being the work of Palladio.

The palace of the counts Chiericati, on one side of the piazza called Isola, designed by Palladio, has two stories; the lower of the Doric, the second of the Ionic order. Under the first is a basement which surrounds the whole building. On the second story is a continued gallery with eleven intercolumniations. The five in the centre project forward a little, and on the ground story have a majestic flight of ten steps. The soffit of this loggia should not have been vaulted as it is, but should have had lacunariæ; the frieze has triglyphs and metopes. The windows of the second story have pediments, on the inclined planes of which are recumbent statues; over these are other windows.

In this edifice are a number of doors that diminish upwards, according to the system of the ancients.

In the same city, the Barbarano palace and the Port are the work of our architect, but not those of Caldogno and Pioveni, as Temanza has supposed. It is very possible that Palladio restored the palace of the counts of Schio, now belonging to the Signori Franceschini, at San Marco in Vicenza. On a beautiful hill, out of Vicenza, is the famous Rotunda del Capra, so called on account of the round hall built by Palladio in the centre, with four galleries answering to the four façades, a majestic flight of steps in front, and a variety of rooms, with four separate and convenient apartments. Besides this elegant edifice, there are innumerable others throughout the whole Vicenza territory. The Godi, Pioveni, Pojana, Caldagno, Tiene, Pisani, and other conspicuous edifices, possess here and there specimens of Palladian beauty. Without the gate called di Monte, on one side the street leading to the last-named rotunda, is a triumphal arch, forming an entrance to a staircase of 200 steps, leading to the Madonna del Monte Berico. The arch is a beautiful structure, but is it by Palladio? The same doubt exists with regard to the house and gallery in the garden of the counts Valmarana, at the Porta del Castello. These are all of a very noble character; so is also the Tiene palace at the Porta del Castello, but it is thought to have been built by one of the brothers, Tiene Marco or Adriano, both intelligent architects. Neither is the palace of the counts Porto at Vancimuggio, five miles from Vicenza, on the Padua road, by Palladio. At Padua, in the Borgo di Santa Croce, is a palace built by him; and it is astonishing that so small a compass should enclose so much convenience. A staircase in front leads to a small terrace surrounded by balustrades: there is a small hall, rooms, and a little church above, smaller apartments over the offices below; it is so rich externally, that it appears like a small temple.

The Palladian buildings, dispersed through various Venetian towns, are both numerous and beautiful: at Stra, for Bernardo; at Frata, in the Polisine, for Bandoero; at Fanzuolo, in the Trevigiano, for Emo; at Masera, for the counts Manini; at Piombino, for the Cornari; at Lisiera, for the Valmerana; at Montagnana, for the Pisani; at Motta, in the Friuli, for Zeno, and numberless others, are attributed to him. But it was sufficient for a fabric to possess any superiority, and it was instantly considered the work of Palladio; as in Rome, any thing superior was said to be by Michael Angelo, Raphael, or Bernini. The vulgar are desirous of honouring great men, and consider this the manner of doing it.

Palladio erected two theatres of wood, after the antique, for various temporary spectacles; one at Venice, the other at Vicenza. The Olympic Academy at Vicenza, of which this architect was a member, and one of the first founders, ordered him to build a substantial one; and he produced a structure so singular, that it formed one of the finest ornaments, not only of Vicenza, but of all Italy. This is the celebrated Olympic Theatre, built after the antique, with this variation only, that instead of being a semi-circle, it is a half ellipsis, which Palladio adopted on account of the narrowness of the situation.

The proscenium is of stone, of three orders of architecture; the two first Corinthian, the third an attic, each variously ornamented. There are three front passages, and two at the sides; the interior of each of which is seen represented according to the rules of perspective. The orchestra, the podium, and the seats placed in front of the stage for the convenience of the spectators, all strictly resemble the structure of the ancient theatres. Over the top of the seats is a gallery curiously curved, following their form. This theatre was finished by Scamozzi; there is consequently a want of that florid elegance, and that

certain harmony between the solid and the light, which at once point out the work of Palladio: instead of this, there is a heaviness and a crowding of the members, which identifies Scamozzi. On a large tablet over the arch of the stage, is the following inscription:—

Olimpicorum. Academia. Theatrum hoc.

A. Fundamentis erexit.

Anno. M.D.L.XXXII. Palladio. Architetto.

The count Giovanni Montanari has written a full description of this theatre. A doubt has arisen lately whether the platea should be covered or uncovered;—this question has employed the ingenuity and pens of the learned, but, I believe, has not yet been decided. Algarotti is of opinion that it should be covered, because such were those of the ancients, on the model of which this is built.

To Palladio is also attributed the famous theatre at Parma, which received its last touches from the hand of Bernini. The platea, or pit, is surrounded by a flight of steps, or seats, on which are raised two orders of columns, forming majestic loggia, the one Doric, the other Ionic. But this is, in fact, the work of Lionello Spada, a painter, and Giambatista Magnani, an architect.

Palladio died at sixty-two years of age, and, attended by all the Olympic academicians, was interred in Santa Croce, the Dominican church at Vicenza. He was of rather small stature, a good carriage, and lively countenance; animated and jocose, but respectful, particularly towards his seniors; modest, the familiar friend of all learned persons, and so perfectly consistent towards his workmen, that they received his instructions with affection and pleasure. He had three sons; the first Leonida, who began to assist his father in his profession; the

second Orazio, who applied himself to jurisprudence: these both died young; the third was Silla, who also studied architecture.

Palladio so well understood the theory of architecture, from his profound study of antiquity and of Vitruvius, that he was enabled to explain to M. Barbaro the form of the Latin theatre, to delineate exactly the Ionic volute, and to draw the figures of Vitruvius; all which the same Barbaro had engraven for the first time in 1556. He illustrated the Commentaries of Cæsar, with some learned interpretations, and forty-one copper plates, representing the quarters occupied by the armies, and the circumvallations of a city. He also studied and wrote much on Polybius. This work, which is yet unprinted, he dedicated to the grand duke Francesco of Tuscany, who received it very graciously. He compiled four famous books, forming a complete treatise on Architecture, which have been printed, reprinted, and translated into most languages. He also wrote copiously on theatres, amphitheatres, arches, termini, aqueducts, and on the method of fortifying cities and gates; but life was not spared him to publish the whole of these works.

The manuscripts were left to the senator Giacomo Contarini, his protector and friend, whose cabinet was enriched with rarities of every species of erudition.

This senator dying soon after, the designs of Palladio were variously dispersed. Many became the property of lord Burlington, who has published a volume on the ancient baths, of which there is only wanting the plan of that of Agrippa.

The public and posterity, the true judges of human merit, have awarded Palladio that fame which his various noble works so justly merit. The most cultivated nations of Europe study his books, and the English justly consider him the Newton of architecture.

The inclination of Palladio was decidedly for the

antique : he even studied ancient tactics, and so well understood them, that being one day in the presence of some gentlemen practised in military affairs, he made some galley slaves and pioneers perform all the movements and military exercises of the ancient Romans, without disorder or confusion. After the example of the ancients, Palladio always preferred constructing his edifices of brick, observing, that the ancient edifices of burnt earth, covered with composition, remained more entire than those of stone. It is true that edifices of covered brick are more durable than stone, because the bricks being more porous, receive the cement, and, binding all perfectly together, form one complete mass ; whereas the pores of the stone being less, prevent this union. Besides which, bricks are lighter, and not subject to be calcined by fire.

With regard to the convenience of Palladio's buildings, a great man has said, that the most delightful habitation was a French house, opposite to a Palladian. This is reasonable ; not that his internal arrangements were made without discernment ; on the contrary, he took many precautions, but, like other celebrated architects, he was obliged to conform to the manners and customs of his time. Architecture, in matters of convenience, must vary according to the manner of living. He made his arrangements with relation to the age in which he lived ; he certainly could not foresee the taste of posterity ; and could he have done so, and made it a consideration, he would have disgusted his contemporaries.

It is in the beauty of architecture that Palladio merits peculiar attention. Having always before him the noble style of the ancients, he acquired simplicity and majesty. He never used recesses or reliefs on the pedestals ; he seldom sculptured the architraves ; and carried his upper ornaments straight, and without projections. His doors, windows, niches, were simple, and their pediments never broken. He preserved the exact character of each order,

never loaded the members of the cornice, nor, without reason, introduced any new ones. He was extremely accurate in the setting out, or measurement, of his entablatures. He varied the proportions of the orders according to the nature of his buildings, and also the internal proportions of his rooms, halls, and temples, using the arithmetical, geometrical, and harmonic proportions. Amidst the various proportions which are found in the ruins of antiquity, he knew how to select the most perfect. His outlines are bold and easy; none of his buildings want character, and in them the grand, the elegant, and serious, are all used with equal success. He made use of the five orders as they might be required, but appeared most attached to the Ionic, and in it most closely followed Vitruvius. He always placed two faces on the capitals. In the Corinthian capital he attached the leaves to the drum, which makes it appear rather heavy. Instead of pediments to the first story, he sometimes placed three courses of quadrangular stones, which, diminishing towards the top, produced a very fine effect. All his cupolas were hemispherical.

There are many abuses occasionally observable in his buildings; but all those which are contrary to his principles, have evidently arisen from the execution: there were many which he could not superintend, and others which were finished after his death. There are also other trifling errors, scarcely worth noticing.

But there are defects of another kind, and we do not describe men, if we omit their defects; to obliterate the trifling blemishes attached to merit, would be unreasonable. In considering Palladio, we must always admire him as an illustrious man, but we are still sometimes reminded that he was but man.

He did not arrive at a sufficient degree of knowledge to discover clearly the principles of his profession. He had some glimmerings of the essence of good architecture,

discovered some abuses, but was not enabled to draw those inferences by which he might have corrected them. He studied rather to imitate the antique, than to examine if it were exempt from faults. Had he been more a philosopher, he would not, so frequently at least, have used the pedestal under columns; placed columns of various heights on the same level: he would have been less lavish of the pediment over doors and windows, nor on the inclined plane of these would he have placed recumbent statues. In some edifices he has suppressed the cornices in the middle, in others left the entablatures entire, and sometimes broken them with pilasters or columns: some of his rooms are without cornices. All this shews the architect acts by a dim and uncertain light. Nevertheless, Palladio is the Raphael of architecture, and most justly deserves to be studied above every other. His edifices were numberless, but he never was employed on magnificent and stupendous structures; these were rare, and fell to the lot only of the Michael Angelos and Berninis. Had an opportunity been afforded him, his majestic and simple style would have triumphed over every other. Of Palladio we may say with Pliny, "*Beatos puto, quibus datum est aut facere scribenda, aut scribere legenda: beatissimos verò quibus utrumque.*" Palladio is then more than blessed, since he said and did things worthy not only of being written and repeated, but also of being looked at with pleasure, and eternally studied and imitated. Vicenza is grateful to her benefactor, and is, perhaps, the only city that has rewarded her Palladio. A work of four volumes in folio, edited by Ottavio Bertolli Scamozzi, containing all the drawings and designs of Palladio's buildings, may be consulted, which does honour to our architect, to Vicenza, and to Italy.

SEBASTIANO DOYA,

(Born 1523, died 1557,)

Was born at Utrecht, in Flanders. He was employed by Charles V. and Philip II. in various fortifications, and designed, with great exactness, the baths of Dioclesian, engraved by the painter Girolamo Coke, and published at Anvers in 1558, at the expense of Antonio Perrenot, bishop of Arras. It is said, that falling ill, he employed the only remedy, abstinence: but there is no remedy always successful, for death is inevitable.

BARTOLOMMEO AMMANATI, A FLORENTINE,

(Born 1511, died 1586,)

AN illustrious sculptor and intelligent architect. He continued the Pitti palace,* of which he made the court,

* Filippo Brunelleschi, in 1435, commenced this palace for Luca Pitti, a rich citizen of Florence. It remained some time in an unfinished state, when it was sold to Eleonora, wife of Cosmo I., who purchased the neighbouring ground, and planted the Boboli gardens. About 1550, Nicolo Braccini, surnamed Il Tribolo, gave designs for finishing the palace, and Bernardo Buontalenti succeeded him. Finally, Ammanati, Alfonso, and Giulio Parigi, completed it. It is regarded as one of the finest palaces in Europe, and is the residence of the grand dukes.

This building has served as a model for imitation to many modern architects; there is a great deal to condemn, as contrary to good taste in architecture. The details and proportions of the orders, introduced by Ammanati, are very beautiful.

surrounded on three sides by a portico of three orders of architecture, of columns in half reliefs: the first Doric, the second Ionic, the third Corinthian; the whole being worked in rustic, but much lighter than the façade. We cannot account for the greater part of the windows in this court having their pediments broken. The solidity of the arches above them is ingeniously contrived: the great space of the cornices is supported in the centre by the key-stones, which spread out more than the lateral ones; the impost, or architrave of the small order, does not in the least interrupt the regularity of the rustic work: the entablature is unbroken. At the extremity of this court, this architect formed a beautiful grotto, of an elliptical figure, whimsically ornamented with isolated Doric columns, and embellished with various fountains, niches, statues, and rich vaultings.

The bridge* of the Holy Trinity at Florence, destroyed by a terrible inundation, was rebuilt by Ammanati, and so nobly, that its superior has not been erected since the revival of architecture. At Rome he made a design for the college of the Jesuit Fathers; but the façade and court are all that now remain of his work; the rest has been entirely changed. This façade, although grand and imposing, is unhappy in the distribution and form of its windows; the doors are heavy, with awkward and insignificant corbels. The court is porticoed with two orders; the first Ionic, the second Corinthian, with small

* This bridge consists of three arches, the middle one 96 feet span, and each of the others 86 feet; the width of the piers 26 feet 9 inches; the clear dimension of the carriage and footways between the parapets is 33 feet. Alfonso and Giulio Parigi, who assisted in constructing this beautiful work, left an account of the manner in which it was carried on. It remains in manuscript in the Florentine library. There is also a description of this bridge under the title, "*Della vera Curva degli archi del Ponte a S. Trinita di Firenze*," by Pietro Ferroni.

pilasters, at the side of the larger ones, which support the impost, on which rest the arches.

At Corso, for the Signori Rucellai, he built the large palace, which afterwards became the property of the Gaetani, and now belongs to the princes Ruspoli. The court is poor and small, and the design of the porticoes bad, the arches resting on the capitals of the columns. It is evident that the intention of the architect was spoiled by the bad execution of others. The façade is ill arranged with regard to the stories; the ground-floor occupies almost half the height of the edifice, and the remainder is given to the two other floors; the last of which has the windows too close to the entablature. Almost opposite this palace, on the Strada Condotti, Ammanati began another, of which the foundations only are seen. The palace of the marquess Sagripante, near that of the duke Altemps, is also his design.

Ammanati* composed a large book, entitled “*La Citta*,” containing designs for all the fabrics belonging to a regular and well arranged city, beginning with the gates, then the palaces of the prince and magistrates, the churches, the fountains, the squares, the loggia for the merchants, the bridges, and the royal theatres.

This important work fell casually into the hands of the mathematician Viviani; it afterwards became the property of the senator Luigi del Riccio, who gave it to the prince Ferdinando di Toscana, and here we lose all traces of it.

* Ammanati first studied under Baccio Bandinelli, afterwards under Sansovino.

COLA DELL' AMATRICE,

AN architect, painter and sculptor, erected in the city of Aquila, a little distance from his native town Amatrice, the façade of the august temple of San Bernardino; and in the architrave of the first order is the inscription :—

Cola. Amatricivs. Architector Instruxit.

This work was begun in 1525, and terminated in 1542. Over the principal door, which is of the Corinthian order, are the effigies, in bas-relief, of the Madonna, and some saints kneeling; among which is that of San Girolamo da Norcia, with the inscription :—

Hieronimus de Nurcia. P. C. V.

who is supposed to have built the two laterals doors.

In the interior of the church are two mausolei; one contains the body of San Bernardino, and was made in 1505, at the expense of Giacomo Noter Nanni Aquilano: the other is of the countess Maria Pereyta Noronia, of the royal blood of Spain, wife of Pietro Lalle Camponeschi Aquilano, count of Montorio, and maternal grandfather of Paul IV. These two works are by Silvestro of Aquila, and Salvator of Arischia, both good sculptors, who executed the portico of Castel Nuovo, in Naples, and at Orvieto the famous devil, in the pediment of the cathedral.

VINCENZO DANTI, OF PERUGIA,

(Born 1530, died 1576.)

HIS family was one fruitful in illustrious men. He was a poet and painter, and so excellent a sculptor, that the statue of Julius III., which he cast in bronze at twenty years of age, is considered a model for the art. He was an architect of a lively genius; and his designs for the Escorial, made by order of the grand duke Cosimo, so pleased Philip II., that he earnestly entreated him to go to Spain to execute them; but his spare habit, and the tranquil life which he led in his own country, prevented him from doing so. He very ingeniously restored the fountain, which had become neglected at Perugia, and executed a number of other works. His brother Fra Ignazio, a Dominican friar, was a painter and mathematician. He painted the Vatican gallery, wrote the life of Vignola, made some discourses on the perspective of that author, and was finally nominated bishop of Alatri.

FRANCESCO, OF VOLTERRA,

(Died 1588,)

FROM being a carver of wood, became an architect. At Rome, he built the church of San Giacomo degli Incurabili, of an elliptical figure, the greater diameter being from the door to the high altar. Within there are two large arches, one at the door, the other opposite to it,

where is the principal chapel. At the lesser diameter are two other smaller arches, with recessed chapels. Between these arches and the large ones are four others smaller, which contain chapels, covered with hemispherical cupolas. - An order of Composite pilasters continues throughout the church, with an entablature above, spoilt by its numerous projections. The roof is disfigured with acute triangular apertures, which answer for windows. These defects are not by Volterra; the church being finished by Maderno, who erected the façade.

This architect built the Lancellotti palace, the nave of the church della Scala, which has a stately appearance, but a variety of defects in the parts, as in the projecting of the entablatures and the carving of the pilasters. He gave the design for the façade of the church of Monserrato, of which only the first order is executed; it is Corinthian, with useless projections, and small ill-proportioned niches. The church of Santa Chiara is in the same taste. It would, perhaps, have been better if Francesco di Volterra had continued to follow his profession as a carver.

ROCCO LURAGO, A LOMBARD,

(Died 1590,)

Was born at Pelsopra, a small place of Comesco. The palace Doria Tursi, in Strada Nuova, at Genoa, the work of the architect Lurago, so much admired by the citizens and foreigners, is an edifice more extraordinary for its immense size, and the abundance of marbles with which it is decorated, than for the purity of its architecture. In passing by Strada Nuova, the court, surrounded by galleries

and arches, with open staircases opposite, form a tout ensemble most pleasing to the eye from its very theatrical effect. It is, however, doubtful whether this arrangement is quite convenient, although it has since been so frequently repeated: being obliged to cross the court in order to gain the stairs; and after ascending them, to have an equal distance to walk in order to reach the hall, appears very inconvenient. The architecture of the court is of a rather harsh and meagre character, as is also that of the galleries at the sides of the façade; the first order of which is Tuscan, with rustic pilasters of Finale stone, and alternate courses of white marble, raised on too high a pedestal, of the same heavy character, and ill agreeing with the upper Doric order, which is lighter, and of fluted pilasters of white marble; overwhelmed, however, with an enormous entablature, with modillions like triglyphs. The larger windows of this second order are of a mediocre form; and those of the superior mezzanini, and of the inferior first story, are overcharged with whimsical heads, surrounded by strange ornaments. The principal, or state floor, is divided into large and beautiful rooms, but destitute of any modern conveniences. The private staircases are heavy, and the upper centre rooms almost uninhabitable, on account of their low ceilings, and the difficulty of looking out of the windows. It is, nevertheless, an edifice which surprises on the first view, and conveys an idea of something more than an ordinary magnificence.

By order of Pius V., he built at Bosco, the native place of that pope, the convent and church of the Dominican friars. This edifice so much pleased the pontiff, and his nephew, the cardinal Ghisleri, that they invited Lurago to Rome. He would not, however, remove from Genoa.

His pupil, Francesco da Novi, built the church of San Bernardo at Genoa, and another to the same saint at Albaro.

FRA GIAN-VINCENZO CASALI SERVITA,
A FLORENTINE,

(Died 1593,)

THE son of a dyer. He learnt sculpture of Fra Gian Angelo, a celebrated sculptor of Florence, and becoming one of the serving brothers of Maria, made a number of statues in various places. The great marble altar in the church of the Serviti of Lucca is all of his work, both with regard to the architecture, the statues, and the embellishments. He was sent for to Naples by the duke Ossuna, the viceroy, to discover some method of relieving the country of Capua from the stagnant waters, which rendered the air pestilential, and to sink some wells for the public use. Such undertakings are more important than raising Ionic and Corinthian orders. Fra Casali succeeded most happily, and was thence declared the royal architect. He constructed the present wet-dock of Naples. He afterwards built an enclosure for the exercise of the cavalry, without Porta Toledana, (perhaps Spirito Santa). By the duke d' Ossuna, this architect was taken to Spain, where he was most honourably treated by Philip II., who directed him to survey and repair the fortress of Portogallo; but while preparing to execute these commands, he died.

LOUIS DE FOIX,

A Parisian architect and engineer. He resided for some time in Spain, as some incorrectly say, to carry into effect the design of Vignola for the Escorial.

Louis de Foix was much admired in France, where he undertook to fill up the ancient canal of the Adour, near Bayonne, and to construct a new one for that port; which he executed with much ease in 1597. But his most curious work is the tower of Corduan, a rock at the mouth of the Garonne, six miles from Bourdeaux. In this situation, so full of falls, currents, and vortexes, this tower serves not only for a light-house, but also for a mark for ships navigating this dangerous sea. It was begun in 1584, and finished in 1610. Its form is round, 169 feet high, and in 1720 it was raised still higher. The ground-floor contains a large vaulted quadrangular hall, with a number of closets and wardrobes; under this are a number of vaults and ware-rooms, and above an apartment for the king. On the second story is a well arranged chapel, with the busts of Louis XIV. and XV. Over the vault of this chapel is a second tower, of less diameter, and above it the lantern, in which is the combustible matter to give light to vessels eighteen miles off. The fire having in the course of time burnt this lantern, one of iron was put up in 1727. The platform is 17 toises in diameter within the work; the tower of the ground-floor is 8 toises and a half without the work; to the first and second story 7 toises; the second tower 16 feet; the lantern 8. Throughout all Europe there is not so magnificent and elegant a structure as this Pharos. In it the Tuscan, the Doric, the Corinthian orders are used; pediments to the windows, and cupolas

at the top; noble apartments, with ornaments of marble both externally and internally. So horrible and almost inaccessible a place to be enriched with architecture and sculpture, is like decorating a hay-loft with the pictures of Correggio.

PIRRO LUIGI SCRIVANO,

A knight of Malta, and so expert in architecture, both civil and military, that he was deputed by Charles V., in 1534, to construct the new castle of Aquila. Between four large towers are the curtains, 24 feet thick, surrounded by a fosse, 70 feet wide and 40 deep.

This castle was considered at that time a prodigy of strength, and now it is but a mere toy. Thus it is that at one time men are looked on as giants, and the next age considers them as pigmies.

MAESTRO BATTISTA MARCHIROLO

BUILT and enlarged the public palace of Acquila, in 1573, for the reception of Madama Margarita d' Austria, natural daughter of Charles V., and wife of Ottavio Farnese, duke of Parma. The building is large, with a high tower at the angle; but it was not all rebuilt after the earthquake of 1703.

DARIO VAROTARI, A VERONESE,

(Born 1539, died 1596,)

A nephew of Teodorico Varioter, a patrician of Argentina, who, on account of his heresy, abandoned his country and settled at Verona. Dario learnt painting under the celebrated Paul Veronese, and followed his profession both in Venice and Padova. At Dola he built a villa for the Signori Mocenighi; and, among various other buildings, erected a casino on the Brenta for the famous Medico Acquapendente, and the graceful Montecchia de' Caodelista, not far from Praglia and Padova. While painting in this casino, a sun-dial suddenly broke the first scaffold on which he was standing, and precipitated him on to the second, without doing him the least injury. This appearing to him a miracle, wrought by the Madonna del Carmine, whom he invoked at the moment of his fall, and his piety being of a most exalted and rational species, he immediately went to Padova, and took on him the habit of the Santa Virgine. Whilst performing his orisons in the church del Carmine he was seized with an apoplexy, which terminated his existence.

JACQUES ANDROUET DU CERCEAU

Is supposed to have been a French architect. By order of Henry III. he built the Pont-Neuf at Paris. He adorned this capital with a number of palaces, as that of Sully,

Mayenne, and the Fermes Générales. He also made the design for the great gallery of the Louvre, built by Henry IV. The style of this architect is somewhat harsh. A number of his works are printed, as, *Various Pieces of Architecture*; the most famous Edifices of France; the Roman Edifices; *Perspective*; and the *Grotesque*.

GIAN-ANTONIO DOSIO, A FLORENTINE,

(Born 1533,)

AT the age of fifteen went to Rome, where he first learnt the business of a goldsmith, then studied sculpture, in which he succeeded admirably. He afterwards gave his mind to architecture; and, besides a number of edifices in Rome and elsewhere, he erected the noble chapel of Santa Croce, at Florence, for the Niccolini family. It is of the Corinthian order, and rich in marbles and statues. He also built the palace of the archbishop.

OTTAVIANO MASCHERINO, A BOLOGNESE,

A painter and architect, who died in the pontificate of Paul III. at eighty-two years of age. At Rome, he added to the pontifical palace of Monte Cavallo, the portico at the extremity of the court, with the loggia, and little façade of double pilasters. He also constructed the winding staircase, of an elliptical figure. For the prince of Santa Croce he built the palace which is now the Monte

della Pieta. He erected the church of San Salvatore, in Lauro, a Latin cross, with double Corinthian columns scarcely detached from the wall. The projections of the entablature, and the pilasters curved at the angles, have a bad effect.

The façade of the palace of Santo Spirito, which is simple and well divided, and that of the church of the same name, on a wide flight of semicircular steps, with two orders of Composite pilasters, with niches and squares in the interpilasters, and a beautiful pediment at the top, free from all projections and small parts, shew the architect an admirer of simplicity. His façade, also, to the church of La Scala is tolerable: it is of two orders, Corinthian and Composite. He also finished the façade of La Traspontina, which was begun by Salustio Peruzzi, son of the celebrated Baldassare. Although full of years, he could only be called an old man for the last ten days of his life, when he could no longer attend to his buildings: his mind continued vigorous to his death.

DOMENICO PAGANELLI, OF FAENZA.

P. MAESTRO, a Dominican, in 1583, conducted the water to the fountain in Faenza, and made trial of it in the square, as published, in 1719, by Carlo Cesare Soaletta, a patrician of Faenza, with some useful observations relative to the preservation of the water: but the appendix, on the manner of conducting it, is very absurd.

PELLEGRINO PELLEGRINI, A BOLOGNESE,
CALLED TIBALDI,

(Born 1522, died 1592.)

HE was surnamed Tibaldi on account of his father, a mason and native of Valsolda, in the Milanese, calling himself Mastro Tibaldo. He became a great painter; so great a one, that the Carracci called him their Michael Angelo reformed, because he softened down the terrific manner of that great man, using a fleshy and natural style of colouring, and treating his subjects with more simplicity. But how much did it cost Pelligrino to attain this perfection? It is related that, when at Rome, he was one day found, by Ottaviano Mascherino, without the Porta Portese, in an act of desperation on account of a picture, with which he was so dissatisfied, that he was determined to starve himself. Mascherino persuaded him, perhaps without much difficulty, to relinquish so absurd an idea, and advised him to devote himself to architecture. Thus Pellegrino followed his advice, and acquired so great a name, that he was declared architect of the cathedral of Milan, and first engineer to the state. The cathedral of Milan was begun in 1387, under the duke Giovanni Galeazzo Visconti, Enrico Zamodia, or Gamodia, a German architect, making the design. Others insist that Caporale, the commentator of the first five books of Vitruvius, built the cathedral of Milan, and the Carthusian monastery of Pavia. For the size, the beauty of the marbles, the quantity of sculptures, carving, &c. this temple is equal to the most renowned: but it is devoid of invention, and form; requiring also a correspondence of parts, and connexion: the members are weak, and too small. It

is a mountain of worked marble and other material brought from distant parts at a great expense, and confusedly placed one over the other, without the least taste. Pellegrino made the pavement in this temple, which is considered rather a fine work. He also gave the design for the façade, which was approved by San Carlo Borromeo, and commenced by Bassi. It is a mixture between the Gothic and the Greek styles.

Martino Bassi was also employed as architect at the cathedral of Milan, of which city he was a native, and vigorously opposed Pellegrino on four points. The first was relative to the level of certain bas-reliefs, which were to be placed over the north door of the temple; the second, to the baptistery; the third, to a small subterraneous temple called the Scurolo; and the last, to the choir. In the first place, Pellegrino wished the bas-reliefs to be composed of two sets of figures. In the second place, he wanted to make the baptistery of a square form, and the columns six diameters apart; with other absurdities to the temple and choir. Bassi opposed the most vehement objections, and asked the advice of Palladio, Vignola, Vasari, and Bertani. These great men condemned all the follies of Pellegrino, and approved the sentiments of Bassi, who published a work entitled “Contests on Architecture and Perspective.” The answer of Vignola, with regard to the baptistery, is particularly celebrated. In order to support his ill-proportioned intercolumniations, Pellegrino proposed to introduce iron chains. Vignola replied, that buildings were not to be tied together in order to be supported—an observation which architects should never forget.

Whilst Pellegrini was occupied on these affairs, Philip II. king of Spain, sent for him to Madrid to paint the Escorial, to rebuild the old royal palace, and various other works. After a residence of some time in Spain he returned to Italy, with a fortune of more than 100,000 crowns; the

monarch presenting him, besides, with Valsolda, of which place he was a native, and raising that fief to a marquissate.

Various are the edifices designed by Pellegrini at Milan; the church of San Lorenzo, with an octangular cupola of equal sides, raised on a basement of the same figure, but the sides unequal; the church of the Jesuits, with a badly decorated nave, and a façade of two orders, full of faults. Ancona boasts the famous loggia; Bologna the Poggi chapel and palace, now the Celesi; the church of the Madonna, near San Celso; and that of the Beata Virgine di Rho, and the court of the Institution, of the Doric order, with metopes of a double square in length.

“ A proof of the great architectural genius of Pellegrini, is the very convenient house formerly inhabited by the suppressed company of the Jesuits. A more than mere irregular situation, surrounded by narrow streets, was the area presented to Tibaldi, though the society required vast and commodious arrangements. Such, however, was the ability of the architect, that in devoting the best part of the ground to a very elegant church, he did not omit the least convenience with regard to the other parts. Every difficulty disappeared before him, and in such a manner, that it seemed he had himself chosen the situation. Commodious offices, a large and light refectory, noble corridors, with excellent and well arranged rooms, a beautiful internal chapel, a large hall for recreation, and a magnificent library; an ample and commodious surgery, with a court and other conveniences, are unanswerable arguments that he not only had an exquisite taste in decoration, but that he possessed an uncommon genius, and a thorough knowledge of all that is required for the comfort and convenience of a great society.

“ The building of the church is the most conclusive eulogium of the sublimity of his talents, and his singular knowledge of decoration and proportion. It is divided

into three naves. The large lateral chapels of the cupola are preceded by two others on each side, with smaller cupolas; as has also the other beyond the large chapel, opposite the small door which leads to the side ailes. The proportions between the three dimensions of width, height, and length, are not to be equalled throughout that city. The principal decoration consists of the shafts of the pilasters being encrusted with marbles, the base of which rests on the pavement at the presbytery, and the others on a simple plinth. What, however, is most astonishing, is the ingenious manner in which the principal entablature, with a majestic pediment, forming a portion of a circle, supported by six columns of black and yellow marble of Porto Venere, is continued over the great altar. These columns are each of a single block, and although lower than the pilasters, are beautifully proportioned, together with the architrave, frieze, and cornice, which is continued over the pilasters with admirable effect. The exterior façade is in equal good taste, and is, perhaps, judiciously carried up only to the first order, since the narrowness of the street would have prevented the second from being seen to advantage.

“ With regard to its solidity this church was somewhat unfortunate, though not in the superior construction, as a crowd of ignorant architects are desirous of making it appear. On account of some subterraneous defect, the foundations of the first pier inclined to the right, as you enter the cupola; and as Tibaldi had constructed it without any visible chains or ribs, the accident was attributed most unjustly to the want of these. Tibaldi, in vain, opposed this irrational censure. It was determined that the pier should be retained in the perpendicular by long and thick clasps of iron, surrounded by heavy circles of the same, and prejudicing the beauty of the church by making these bands apparent, which were not calculated to repair the defect: so that, after an immense expense, they were

obliged to have recourse to the only effectual remedy, that of strengthening the foundations of the unstable pier." This overwrought panegyric of the Genoese works of Tibaldi is from the hand of a native of Genoa.

DOMENICO TIBALDI, A BOLOGNESE,

(Born 1541, died 1583,)

A son and disciple of the last named Pellegrino, was also a renowned painter and architect, and, moreover, a great carver. He erected the chapel in the cathedral of Bologna, of which Clement III., on his return from the conquest of Ferrara, said, that Rome did not contain one equal to it. There are a variety of edifices in Bologna much to his credit, especially that of the Gabella, matchless in its kind; the small temple of the Beata Virgine del Borgo, on the Wall; the great door of the city palace, in which was placed the statue of Gregory XIII.; and, above all, the Magnani palace. This edifice is of two orders, without entablatures between, whence an harmonious unity results. It is rather diminutive, but from its manner of treatment appears large; and its court, although small, has all the effect of great space. This excellent architect died in the prime of life, and his body was interred in the church of the Nunziata, at Bologna, followed by a numerous family.

GIAMBATISTA CASTELLO, OF BERGAMO.

THE church of San Matteo, in Genoa, founded by Martino d' Oria in 1125, was entirely rebuilt in 1278, in the then prevailing taste, vulgarly called Gothic. The prince Andrea Doria, and his successors, had it entirely remodelled about 1560, in its present elegant manner. The architect, on this occasion, is said to have been Giambatista Castello, called *il Bergamasco*. It was decorated with painting by Luca Cambiaso. Whoever was the architect, this work may undoubtedly serve as a model in all similar cases. In it, all the lightness of the first design is preserved, stripped of those rude ornaments originally belonging to it, the character of which is still exemplified in the façade. The vault of the great nave is divided into two parts, and is ornamented with stuccoes on a gilt ground: the centre is occupied by a well painted oval. The form of the principal entablature is light, and projects but a very little, and is here and there enriched by painting. The smaller naves are in the same taste, and ingeniously adorned. The cupola is of an octangular form, with small windows at the base of the drum, flanked by little figures in relief, in various attitudes, and which appear to support it all round: it is ornamented with compartments of white roses, on a gold ground: if the fasciæ which contain them were a little less enriched with sculptures, they would have a better effect. The cupola and choir do not seem, with regard to the ornamental parts of the vaulting and walls, by the same author, and they, with the subterraneous crypt, are supposed to be the work of the celebrated statuary Gian-Angiolo Montarsoli; by whom are also the statues of the superior choir, and the sepulchral urn of Andrea Doria in the inferior.

The walls of the small naves are by an unknown hand of mediocre talents. The whole is far too excellent to be disgraced by the tribunes lately placed there, which are destitute of symmetry: they should also be relieved from the damp, which is gradually ascending, and has almost reached the roofs; where, if not stopped, it will speedily spoil the beautiful paintings, sculptures, stuccoes, and gilding, with which it is so elegantly adorned. Among the number of Gothic churches susceptible of improvement, that of Santa Caterina, of the Benedictines, after the example of San Matteo, might become one of the most beautiful of Genoa, being, in its general proportions, a master-piece. Such a restoration would facilitate the enlargement of the street between the church and palace of Rovere, now much too narrow, and unworthy of the superb Genoa, many of the buildings of which are in the very best taste.

The imperial palace at Campetto, the staircase of which is extremely bad, though the exterior decorations are respectable, appears to have been designed by Giambattista Castello. Between the windows of the upper state floor are painted some fabulous deities, as there are also in the portico, which is well set out, and finished with stuccoes. The first order of this façade is a continued rustic; the second has raised bossages, and windows with a level entablature of marble; and the third round medallions, and windows with beautiful marble jambs, finished in a good manner. The door consists of two fluted Doric columns, with a well-proportioned entablature above, which continues with a less projection over the two windows of the portico, supported by fluted pilasters, which together with the ornament of the windows, form a specimen of good architecture, now disfigured by modern embellishments.

GIAMBATISTA BERTANO, OF MANTUA,

A CELEBRATED architect, well versed in the study of the ancient edifices of Rome, and expert in perspective. Besides the letter which he wrote to Bassi concerning the disputes relative to the cathedral of Milan, there is another work of his published, on some obscure passages in Vitruvius, and particularly on the Ionic order. He was much esteemed by Guglielmo III. Gonzaga, duke of Mantua, who declared him gentleman superintendant of all the buildings of the state, and, in 1565, caused him to erect the church of Santa Barbara, with that noble campanile of four orders, in which is an inscription in honour of the architect.

BERNARDO BUONTALENTI, A FLORENTINE,

(Born 1536, died 1608,)

WHILE a child, the house in which he lived, being situated on the banks of the Arno, gave way, and his parents were buried in the ruins; he alone was saved, by falling under a vault, and was taken under the protection of the grand duke Cosmo. He was of a most lively genius, extremely clever in statuary and in civil and military architecture, having been much benefitted by Buonarotti and Vasari. He was an excellent miniature painter, and a great mechanic, and peculiarly famous for the making of fire-works, whence he was named Bernardo delle Girandole.

He designed the villa of Marignolle, now Casa Capponi : it is a small well-arranged palace, of three stories, has a beautiful Corinthian door, and balustrade before the windows, at proper distances from each other, and very well ornamented. He built the villa of Artimino for the grand duke, and the famous one of Pratolino ; the plan of which is so ingenious, that without courts, loggia, or other spaces, by which means architects generally give the necessary light to their buildings, every apartment is provided with sufficient. The machines for raising and conducting the water are extremely curious ; as are a variety of hydraulic organs and instruments, which have since served as examples to all Europe. This villa cost 78,000 crowns.

Buontalenti also improved the villas of Castello and Petraja, belonging to the grand duke, and greatly improved the garden di Boboli, designed by Tribolo.

For the grand duke he built a palace, called the Casino, behind San Marco ; elegant and simple, with doors and ornaments which are much admired. He also made the façade to the palace of the Piazza, in the Tuscan order ; it is beautiful of its kind. The celebrated gallery, in which the statues were also placed, the façade of the church of Santa Trinita, a palace for Acciajuoli, which now belongs to the Corsini, and the façade of the Strozzi palace, in Via Maggiore, are entirely by him, except the latter, of which he only executed the first story : it is rustic, with a large door and small windows, ornamented, or rather deformed, with broken pediments in the centre. Scamozzi erected the second story, of Ionic pilasters, between which are windows flanked with small Ionic columns, and over these are the small windows of the mezzanini.

In the same Strada Maggio, Bernardo also erected the façade of the Palazzi Ricardi and Martelli. At Pisa he built the palace of the grand duke : the façade of the

church de' Cavalieri, and also the palace at Sienna. The Tuscans are great admirers of the style of this architect, and even of his broken pediments, placed on one side like horns. It is true that he used these whims in the interior of edifices, but they do not, therefore, cease to be extravagances, to which *il Buontalenti* was much attached. He erected a number of fortifications; as at Civita di Tronto, in the kingdom of Naples, and at Porta-Ferrajo. At Livorno he planned the Fortezza Nuova, and a number of bastions at Pistoja, at Prato, and at Florence, where he also constructed the fortress of Belvidere. He was engineer of all Tuscany, and raised bridges, embankments, and machines in various parts.

But his invention was most evident in curious machines and decorations for theatres, and sacred and public festivals.

He also invented a method of preserving ice and snow; and to reward him, the grand duke gave him, during his life, all the duties upon those articles. He was so much attached to him, that he commonly took him in his own carriage, not only to evening amusements, but about the city during the day. When some of the courtiers were criticising Bernardo's designs, he requested them to draw their ideas, as his memory was so frail he could only thoroughly understand their meaning on paper. This threw them into confusion, for they were not only unacquainted with drawing, but with the subject they professed to criticise. The grand duke was pleased with his stratagem, and laughed heartily at them.

Buontalenti was lively, kind towards his pupils, especially to those who were poor, but of superior genius, whom he treated with the utmost generosity. He was disinterested, and spent vast sums in models and inventions. He, however, had to endure much from the envious, who pursued him every where, and greatly embittered his latter years.

GIULIO PARIGI, A FLORENTINE,

(Died 1590.)

HE was son of Alphonso Parigi, an architect of ordinary practice, who, after the death of Vasari, finished the building of the Uffizj Nuovi at Florence. Giulio was a disciple of Buontalenti, and became both a civil and military architect, and acquired such fame in drawing, mathematics, and the mechanics, that he was selected to teach them to the princes of Tuscany. He gained great credit for his decorations for various festivals, as also in the architecture of the imperial villa of Poggio, the convent of the Augustine Fathers at Florence, and in that of La Pace, belonging to the Fathers of San Bernardo, without the Porta Romana. The Marucelli palace, which he erected at Florence, is of tolerably good architecture.

SANTI DI TITO,

(Born 1538, died 1603.)

WAS born at Borgo San Sepolcro, in Tuscany. He became a very correct painter, but his architecture was neither magnificent nor elegant, although he always attended to the proportions. He built a villa at Peretola, of an octangular form, for the Spini, and was employed at Casciano by the Corsini, and at Monte Oliveto by the Strozzi family. At Florence he built a house for himself, with

the door diminishing in its height. He made a staircase for the Strozzi palace at Florence, with which Buontalenti was disgusted. The palace he erected at Florence for the Dardinelli is of three stories, badly arranged, with windows of various sizes, some resting on consoles, and some not: all are ill decorated. He was admitted to the freedom of Florence.

GIAMBATISTA CAVAGNI, A NEAPOLITAN,

(Died 1600,)

IN conjunction with Vincenzo della Monica, built the church and convent of San Gregorio Armeno, vulgarly called San Liguoro. The sacred Monte della Pietà is also attributed to Cavagni, and does him honour.

Dionisio di Bartolommeo is thought to have been a disciple of Cavagni. The church of the Fathers dell' Oratorio, called that of the Geromini, is by him. The façade, although of two orders, is good; the plan is a Latin cross, of three naves; the greater divided from the lateral ones by marble columns; on the capitals of which, most barbarously, rest the arches. This church, with the habitation for the Fathers, was finished in 1597.

About this time Giovanni Simone Moccia flourished in Naples, and in 1600 entirely rebuilt the church of Spirito Santo, which was then thought very beautiful, but it has been since much improved. It is to be regretted that the buildings of Naples are of so short a duration, from a fault in their construction rather than in the materials. In the new badly arranged façade of this church, of the work of Moccia, the door only remains, which is flanked by two columns, with a disproportionate intercolumniation.

The interior is entirely changed, except in the design of the Corinthian columns detached from the wall, supporting an entablature, which runs uniformly without any projections round the whole ample area of the church.

DOMENICO FONTANA,

(Born 1543, died 1607,)

LEFT his own country, Mili, on the Lake of Como, at the age of twenty, to join Giovanni Fontana, his eldest brother, at Rome, who was studying architecture, to which Domenico also applied himself, having acquired the rudiments of geometry. The cardinal Montalto, afterwards Sixtus V. employed him to build the chapel of the Presepio, in Santa Maria Maggiore, and the little palace della Villa, which now belongs to the Negroni, near the same Basilica: but pope Gregory XIII. having deprived the cardinal of his income, thinking that his building was an evidence of too great riches, it was suspended for want of funds; but Fontana being attached to the cardinal and to the building, sent for 1000 crowns, which he had saved by his own industry, with which he was enabled to continue the chapel. This act of generosity made the fortune of Fontana. Soon after the cardinal Montalto became Sixtus V. and Fontana the pontifical architect. The chapel was soon completed, to the admiration of all. Its form is a Greek cross, with four large superb arches, on which rests an elegant cupola. It is ornamented with Corinthian pilasters, and a useless cornice, and projections that are still more so. Every thing is falsely placed from resting on the arches. The ornaments of the windows are extremely heavy, and the pediments, which

do not agree with the interior, are insufferable. We do not here speak of the various sculptures in this chapel, because our architect was not concerned in them, but with regard to the architecture of the two sepulchres, there are some great errors.

Within this chapel, under the altar in the centre, Fontana placed the Persepio chapel, which was in another part of the church; from whence he removed it entire, although old, and having arches, doors, windows, &c. The little palace, before alluded to, was also finished, and elegantly: it is of three stories, the first Doric pilasters, the second the Ionic order, and the third Corinthian. Fontana might have spared the two lower cornices. This villa was embellished with a variety of walks, statues, noble fountains, and another Palazzino, looking towards the baths of Diocletian. The first story of this edifice, with two orders of little windows, is not happy; much less so is that species of attic which is in the centre above, and so extravagantly high, that it has three orders of small windows, where one would have sufficed. At the side of this palace, and in front of a walk, is a light gate, with Ionic columns.

Sixtus V. was now desirous of raising in the centre of the square of St. Peter's the only obelisk which remained standing, but partly interred, near the wall of the Sacristy, where was formerly the Circus of Nero. Other pontiffs had had the same wish, but the difficulty of the enterprise had prevented the execution.

This obelisk, or pyramid, is of red granite, called by the ancient Romans *Marmor Thebanum*, (Theban marble,) on account of having been worked near Thebes, in Egypt, whence it was transported to Rome in the time of Cæsar. Of the immense number in Rome, this is the only one remaining entire; it is without hieroglyphics, 84 feet high, 8 feet 6 inches wide at the base, and 5 feet 6 inches at the top. One cubic foot of this granite weighs about

160 pounds; so that the whole weight of the obelisk must be somewhat less than 759,000 lb. Of the manner in which the Egyptians and Romans moved these enormous masses we have no idea, and so many centuries having elapsed since such a thing had been done, this proposition of Sixtus V. was considered so novel, that a general assembly was called of all the mathematicians, engineers, and learned men from various parts of Europe; and, in a congress held by the pope, more than 500 persons presented themselves, bringing with them their inventions; some with drawings, some with models, others with writings or arguments.

The greater number were for removing it by means of an iron carriage and thirty-two levers. Others invented a half wheel, on which the obelisk was to be raised by degrees. Some proposed screws, and others thought of carrying it upon slings.

Bartolommeo Ammanati, a Florentine architect and sculptor, sent expressly by the grand duke, presented himself before the pope, without either models or designs, and requested a year to consider it; for this he was most severely reprimanded by the pontiff. Fontana exhibited his wooden model, with a leaden pyramid, which, by means of a windlass and crane, was raised and lowered with the greatest facility; he explained the nature of these machines and movements, and gave a practical proof of their capability by raising a small pyramid in the mausoleum of Augustus, which was in a ruinous condition. After many disputes, Fontana's invention was approved; but, as he had not yet acquired a name of sufficient importance, the execution of it was committed to two architects of renown, Giacomo della Porta, and Bartolommeo Ammanati. These immediately commenced a scaffold in the centre of the square where the obelisk was to stand.

Fontana being justly displeased that his own discovery should not be entrusted to his execution, went to the

pope, and respectfully represented to him, that no one could so properly execute a design as the inventor. Sixtus was persuaded, and committed the entire direction of it to him. The architect then commenced his work with the utmost celerity. He dug a square hole of 44 feet, in the piazza, 24 feet deep, and finding the soil watery and chalky, he made it firm by strong and massive piles. At the same time he had ropes made, three inches in diameter, 1500 feet long, an immense quantity of cords, large iron rods to strengthen the obelisk, and other pieces of iron for the cases of the cranes, pins, circles, pivots, and instruments of every kind. The iron to secure the obelisk alone amounted to 40,000lbs., and was made in the manufactories of Rome, Ronciglione, and Subbiaco. The beams, taken from the woods of Nettuno, were of such a prodigious size, that each was drawn by seven pair of buffaloes. From Terracina elm was brought, for the caseing, and shafts of Holm oak for the windlass, besides other timbers.

To move the pyramid, Fontana ordered a wooden carriage, widened the piazza, removed the wall of the Sacristy, to erect the windlass; and to prevent the ground from giving way, it being soft and marshy, in consequence of the great weight, he made a bed with two layers of timber, crossing each other in a contrary direction. On this foundation he placed the castle or carriage, which had eight columns: each of these columns was composed of so many thick planks, that they measured 13 feet in circumference. These were united together by thick cords, without screws, in order to be done and undone with greater quickness. The height of the beams were required to be 90 feet; and not any being of that length, they were placed one on the other, and united by iron bands. These columns were strengthened by forty-eight braces, and tied together on all sides. The obelisk was entirely covered with double mats, to prevent its

being injured ; it was then surrounded by planks, over which were placed large rods of iron, and these embracing the thick part underneath, came directly over the four faces of the mass, which thus became totally encircled with these coverings. The whole pyramid thus weighed one million and a half pounds. Fontana calculated that every windlass, with good ropes and cranes, would be able to move 20,000 lbs. weight ; and consequently forty would move 800,000, and he gained the rest by five levers of thick beams 52 feet long.

So novel an apparatus excited the curiosity of all Rome, and of foreigners also, who came from distant countries to see what effect would be produced by this wood of beams, mingled with ropes, windlasses, levers, and pulleys. In order to prevent confusion, Sixtus V. issued one of his mandates, that on the day of its being worked, no one, except the workmen, should enter the enclosure, on pain of death, and that no one should make the least noise, nor even speak loud. Accordingly, on the 30th of April, 1586, the first to enter the barrier was the chief justice and his officers, and the executioner to plant the gibbet, not merely as a matter of ceremony. Fontana went to receive the benediction of the pope, who, after having bestowed it, told him to be cautious of what he did, for a failure would certainly cost him his head. On this occasion, Sixtus felt the difference between his regard for his own glory and his affection for the architect. Fontana, in terror, secretly placed horses at every gate, ready to convey him from the papal anger, in case of an accident. At the dawn of day, two masses of the Holy Ghost were celebrated ; all the artificers made their communion, and received the papal benediction, and before the rising of the sun all entered the barrier. The concourse of spectators was such, that the tops of the houses were covered, and the streets crowded. The nobility and prelates were at the

barriers, between the Swiss guards and the cavalry : all were fixed and attentive to the proceedings; and, terrified at the sight of the inexorable gibbet, every one was silent.

The architect gave an order that, at the sound of the trumpet, each should begin working, and at that of the bell placed in the castle of wood, each should desist: there were more than 900 workmen, and 75 horses. The trumpet sounded, and in an instant, men, horses, windlasses, cranes, and levers, were all in motion. The ground trembled, the castle cracked, all the planks bent from the enormous weight, and the pyramid, which inclined about a foot towards the choir of St. Peter, was raised perpendicularly. The commencement having prospered so well, the bell sounded a rest. In twelve more movements the pyramid was raised almost two feet from the ground, in such a situation that it could be placed on the rollers, and it remained firmly fixed by means of wedges of iron and wood. At this happy event the castle of St. Angelo discharged all its artillery, and a universal joy pervaded the whole city.

Fontana was now convinced that the ropes were better than iron bands, these being most broken or distorted, or expanded by the weight. On the 7th of May the pyramid was placed on the sledge—a more difficult and tedious operation than that of raising it, it being necessary to convey it over the piazza to the situation intended for it, which was 115 rods from where it then stood. The level of the piazza being about 30 feet lower, it was necessary to throw up an earthen embankment from one place to the other, well secured by piles, &c. This being done, on the 13th of June, by means of four windlasses, the pyramid was removed with the greatest facility on the rollers; to the place of its destination. The pope deferred its erection to the next autumn,

lest the summer heats should injure the workmen and spectators.

In the mean time, the pedestal, which was interred 30 feet, was removed : it was composed of two parts, the ogee and basement being of the same mass, and the plinth of white marble. All the preparations were made for this last operation on the 10th of September, with the same solemnities; 140 horses and 800 men were employed. The pope selected this day for the solemn entrance of the duke of Luxembourg, ambassador of ceremony from Henry III. of France, and caused the procession to enter by the *Porta Angelica*, instead of the *Porta del Popolo*. When this nobleman crossed the *Piazza of St. Peter's*, he stopped to observe the concourse of workmen in the midst of a forest of machines, and saw, admiring, Rome rising again by the hand of *Sixtus V.* In fifty-two movements the pyramid was raised, and at the setting of the sun it was placed firm on its pedestal. The castle disappeared, and the artificers, intoxicated with joy, carried *Fontana* on their shoulders in triumph to his own house, amidst the sound of drums and trumpets and the plaudits of an immense crowd.

In placing it upright on the pedestal, *Fontana* considered the method adopted by the ancients as the least difficult; which was to rest one end on two globes, then draw the point round, raising it at the same time, afterwards letting it fall perpendicularly on the pedestal. It is conjectured that this was the practice adopted by the ancients, because two dies alone were always covered with lead for a foot or more, and were moreover crushed at the extremities. *Sixtus V.* placed a cross 7 feet high at the top of the obelisk, which was carried in procession, and which made the whole height 132 feet.

For this undertaking *Fontana* was created a knight of the *Golden Spur*, and a Roman nobleman: he had a pension of 2000 crowns, transferable to his heirs, ten

knighthoods, 5000 crowns of gold in ready money, and every description of material used in the work, which was valued at more than 20,000 crowns. Two bronze medals of him were coined; and the following inscription was placed on the base of the pyramid by order of the pope :—

Dominicus Fontana,
Ex. Pago. Agri. Novocomensis.
Transtvlt. Et. Erexit.

But this inscription is so small, that those unacquainted with its being there would not observe it.

Thus Sixtus V. and Fontana have acquired so much glory from the erection of this pyramid; while the artists who worked it, and those who removed it such a distance, are lost in oblivion. That part of history which describes the works of Archimedes, shews us that in some things we are but pigmies, when compared with the ancients. But what is the value of these obelisks, for the working, transporting, and erecting of which so many rewards and anxieties have been created? All their worth consists in the difficulties surmounted. But from this species of vanity some advantages have certainly arisen; as the invention of machines—the employment of men—fame and riches to the artists.

In 1769 the count Marino Carburi, of Cephalonia, moved a mass of granite, weighing three million pounds, to St. Petersburg, to serve as a base for the equestrian statue of Peter the Great, to be erected in the square of that city, after the design of M. Falconet, who discarded the common mode of placing an equestrian statue on a pedestal, where, properly speaking, it never could be; and suggested a rock, on which the hero was to have the appearance of galloping, but suddenly be arrested at the sight of an enormous serpent, which, with other obstacles, he overcomes for the happiness of the

Muscovites. None but a Catherine II., who so gloriously accomplished all the great ideas of that hero, could have brought to perfection this extraordinary one of the artist. An immense mass was accidentally found buried 15 feet in a bog four miles and a half from the river Neva, and fourteen from St. Petersburg. It was also casually that Carburi was at the city to undertake the removal of it. Nature alone sometimes forms a mechanic, as she does a sovereign, a general, a painter, a philosopher. The expense of this removal was only 70,000 rubles, and the materials left after the operation were worth two-thirds of that sum. The obstacles surmounted do honour to the human understanding. The rock was 37 feet long, 22 high, and 21 broad, in the form of a paralleloepidon. It was cleft by a blast, the middle part taken away, and in the cavity was constructed a forge, for the wants of the journey. Carburi did not use cylindrical rollers for his undertaking: these causing an attrition sufficient to break the strongest cables. Instead of rollers he used balls composed of brass, tin, and calamina, which rolled with their burden under a species of boat 180 feet long, and 66 wide. This extraordinary spectacle was witnessed by the whole court, and by Prince Henry of Prussia, a branch from the great Frederick. Two drums at the top sounded the march; forty stone-cutters were continually at work on the mass during the journey, to give it the proposed form — a singularly ingenious idea. The forge was always at work: a number of other men were also in attendance to keep the balls at proper distances, of which there were thirty, of the diameter of five inches. The mountain was moved by four windlasses, and sometimes by two; each required thirty-two men: it was raised and lowered by screws, to remove the balls and put them on the other side. When the road was even, the machine moved 60 feet in the hour. The mechanic, although continually ill from the dampness of the air, was still inde-

fatigable in regulating the arrangements; and in six weeks the whole arrived at the river. It was embarked, and safely landed. Carburi then placed the mass in the square of St. Peter's, to the honour of Peter, Falconet, Carburi, and of Catherine, who may always, from her actions, be classed among illustrious men. It is to be observed, that in this operation the moss and straw that was placed underneath the rock, became by compression so compact, that it almost equalled in hardness the ball of a musket. Similar mechanical operations of the ancients have been wonderfully exaggerated by their poets.

In the erection of the other obelisks in the Piazza del Popolo, in Santa Maria Maggiore, and the Giovanni Laterano, Sixtus V. employed the cavalier Fontana.

This architect adorned the façade of San Giovanni Laterano, that is, the one opposite to Santa Maria Maggiore, with a Travertine portico of four arches of Doric pilasters, and a loggia above of the Corinthian order, for the Benediction. Fontana paid but little attention to this Doric: he doubled the pilasters at the angles in order to give greater strength, and on this account the metopes of the inter-pilasters are too long. Instead of placing the mutule under the cornice, he placed the dentels, which do not agree exactly with the Doric order.

On one side of this portico he built the superb palace, of three stories, for the use of the pope. The mouldings to the windows are clumsy, and the architraves too wide. The third story is further from the second than the second from the first; the arrangement should be precisely contrary. The windows in the frieze under the cornice, and the two rustic doors, are monstrous: although in itself the rustic work is extremely elegant, it does not look consistent in a building really majestic. In order to build this palace, it was necessary to remove the holy staircase, and place it in the Sancta Sanctorum, where Fontana added

some more steps for greater convenience, and made a façade, with arches and Doric pilasters. In this, which is a most deformed work, there is a confusion of triglyphs and metopes carried for the length of a mile: there are both dentels and mutules. These faults may have been occasioned by the absence, or after the death, of the architect, as we do not see them introduced in the book which Fontana published.

Sixtus V., who was always desirous of doing many things at the same time, employed Fontana on the Vatican library, who resolved to carry it across the Belvidere court, and thus spoilt the most beautiful work of Bramante d'Urbino. This room was placed on a level with the two long corridors, between which it is enclosed. The ingress is by descending a step; and the egress to the side, in order to enter the opposite corridor, in which is the library, is by ascending. The architecture of this library, with the simple pilasters, which support a very clumsy roof, do not look consistent with an edifice of this nature. At the same time Fontana also began that part of the palace which looks towards the square of St. Peter's and the city, and which is the most conspicuous in that group of palaces called the Vatican. This edifice may be considered a companion to the palace of San Giovanni Laterano.

Our noble architect had also some part in the Quirinal palace, near the Piazza and Strada Pia. He likewise enlarged the Piazza, and removed to it, from the baths of Constantine, the two colossal statues and famous horses, placing them advantageously opposite the long street which leads to the Porta Pia. Where this street crosses another of great length, called Strada Felice, he erected fountains at the four angles: they are too meagre for the finest situation in Rome, which required an ample and elegant square, arranged more magnificently. Here he also

built the palazzo Mattei, now Albani, which has since been enlarged: its architecture has nothing remarkable.

Fontana restored the two celebrated columns of Trajan and Antoninus, and built the Mendicant's hospital, now the Convitto di Sacerdote, at the Sistine bridge; and among his other works is the gate of the Cancellaria. He superintended the conduit of the Acqua Felice, which was brought from a mountain under the Colonna, a small castle eighteen miles from Rome; but in order to avoid the hills and vallies, the aqueduct is twenty-two miles long. The arches in some parts are 52 feet high; they are carried fifteen miles above ground, and seven under. Two thousand men were constantly employed in this work, and sometimes three and four thousand. In the square of the Baths, where this water first shews itself, he built a large fountain, ornamented in the centre-niche with a Moses, and at the sides with bas-reliefs, alluding to the Hebrews in the desert. This should have been a rustic work, and the water have issued from hills and rocks, and not amidst polished stones and Ionic columns, and a number of lions, which, neither in the order of nature nor by a miracle, spout forth water, or remain in the society of man. Artists always appear to have had great pleasure in converting lions into aquatic animals: here they spout water; at the foot of the Campidoglio they do the same; and finally, to the gutters of roofs they are made to fill an office by no means characteristic of them. "*Delphinium sylvis, appingit fluctibus aprum.*" The façade of this fountain has since had an attic added to it, which is much too lofty.

Sixtus V. was desirous of converting the Coliseum into a woollen manufactory: Fontana made a design adapted to the ancient elliptical form of the amphitheatre, with four gates of entrance, and as many staircases, a fountain in the centre, galleries all round for the artificers, and

shops and rooms within. The levelling the ground on the exterior was begun, when the pope died ; after which the design was abandoned.

While Fontana was occupied on a bridge of Travertine over the Tiber, at Borghetto, near La Marca, so many complaints were made concerning him, that Clement VIII. deprived him of the situation of pontifical architect, and required moreover an account of the money employed in his various buildings. The count Miranda, viceroy of Naples, sent for him to that capital, and declared him the royal architect and first engineer of the kingdom. We cannot account for M. Carrara, in his learned dissertation on the decay of marbles, making him preside over the *Vellino nella Nera*, from 1596 to 1601, under the same Clement VIII.

When Fontana arrived at Naples, 1592, he penned up various waters which had sprung in the *Terra di Lavoro*, renewed the ancient canal of the *Clanio*, vulgarly called *Lagno*, and conducted the water from *Sarno* to the tower della *Nunziata*, for the use of the mills at Naples. Under the viceroy, the count *Olinarez*, he began the *Strada di Chiaja* along the sea-shore, adorned it with a number of fountains, and raised the *Strada di Santa Lucia*, which leads to the sea, levelled the piazza of *Castel Nuovo*, and erected in it the fountain *Medina*, the richest in Naples. At the archiepiscopal gate he placed three shrines, with the statues, which are the monuments of the king *Charles I.*, of *Carlo Martello*, and of *Clemenza*, his wife. In the archbishopric of *Amalfi* he built the altar of *Sant' Andrea*, and at *Salerno* that of *San Matteo*, with their confessionals under them, the descent to which is by a double flight of steps.

The greatest work which he undertook at Naples was the royal palace, by command of the count *Lemos*, viceroy. This palace is of three stories : the first is por-

ticoed, with Doric pilasters, the second Ionic, and the third Composite, with small pilasters, which have windows between them. It was intended to have had three large doors; the centre one, ornamented with isolated Doric columns of granite, from the isle of Giglio, was to have conducted to a rather small court, and the two lateral ones to two others. The principal façade is 380 feet long, the sides 260, and the height 80. In the façade there are twenty-one windows. The interior has been changed from the design of Fontana, principally in the staircase, for which the count Monterey substituted another, extremely large. It is, however, much admired, although its want of proportion is manifest; but the commonality, surprised at its extraordinary size, confound that quality with the idea of beauty. The disfigurement of the stairs has involved that of the hall. This palace has latterly had many additions made to it in situations where buildings should never have been placed, preserving the old palace, which is a perfect wilderness, and ought long ago to have been pulled down. It is a fatality attending Naples, that she should never have an entire edifice of good architecture.

Fontana also made a design for an enclosed haven to the tower San Vincenzo, with a pier 400 canna long; only 30 of them were done, and the remainder has never been added. He died rich and honoured at Naples, and was buried in the church of Sant' Anna of the Lombards, in a chapel of his own building, and in which his son, Cesare Fontana, who was declared his successor as royal architect, erected a monument worthy of his memory. Domenico Fontana has left a folio volume on the removal of the Vatican obelisk, and some other buildings erected by him in Naples and Rome.

His genius in mechanics was great — much greater than the purity of his taste for architecture. He did not preserve the proper characters peculiar to the orders: his

style was meagre and tame, nor did he avoid any of the various abuses then in practice. His inventions were grand; and the cavalier Domenico Fontana is worthy a place among the most distinguished artists. Cesare Fontana, just mentioned, who was also a cavalier, designed a variety of buildings in Naples, among which that of the public granaries is remarkable, capable of containing more than 2000 measures of corn. But the most stupendous work by this architect is the university or schools. This great building was begun in 1599, by order of the viceroy, Don Ferdinando de Castro, count Lemos, and a great lover of arts and literature. In the arrangements of the plan there is not much genius displayed, and still less in the façade, which is a long low line, with a pavilion in the centre, disproportionately high with regard to the sides. The decorations are clumsy and incorrect. It is pretended that the statues in the niches of the façade are antiques, and are likenesses taken of the family of Marcus Agrippa, and adorned some palace which this Roman personage had at Cuma: but it is also said that Ulysses was at Naples for no less a purpose than to teach Grecian literature. This was the dream of the father Orso, a Jesuit; and it is even recorded in an inscription over the door of the university. It is now intended to convert this edifice into an academy of science, with museums of every description, libraries, an observatory, a botanical garden, and whatever else may be necessary to place Naples on a level with the most learned cities of Europe.

GIOVANNI FONTANA

(Born 1540, died 1614,)

ASSISTED his brother Domenico in his various works at Rome. He was also architect of St. Peter's; and the palace of the Guistiniani princes, which possesses some merit, is supposed to be his design. But his greatest excellence consisted in his knowledge of hydraulics. He cleansed the Tiber at Ostia; settled some contentions which had existed from time immemorial concerning the Velino, between Terni and Narni; supplied Civitavecchia and Veletri with water, and conducted the Algida to Frascati to ornament the Belvedere villa, and also to the Villa di Mondragone, for the purpose of supplying some curious fountains. He restored and renewed the ancient aqueduct of Augustus, by order of Paul V., to receive the waters of the Bracciano, which discharges itself like a large river, by five mouths, above San Pietro Montorio, where he erected the magnificent fountain, similar to that of Termini. Ionic columns, on very slender pedestals, appear inadequate to support the lofty attic, and the heavy escutcheon containing the papal arms. He carried the aqueducts over the Ponte Sisto, to form the beautiful cascade opposite the Strada Giulia. In this fountain the columns are attached to the walls, producing a heavy effect. He also supplied the towns of Recanati and Loretto, and strengthened the supports and parapet to the cascade at Tivoli. He was sent by the pope to Ferrara and Ravenna, to repair the damages made by the Po in those provinces; and, while thus occupied, was taken ill; and, returning to Rome, died at 74 years of age. He was buried in the church of the Araceli.

FRANCESCO GRIMALDI

WAS born at Oppido, in the kingdom of Naples. His first work in that capital was the house of the Teatini, called Santi Apostoli, which was erected in 1590. His design was preferred before others for the construction of the chapel of the treasury, in the cathedral, though some have supposed the architect to have been the father Francesco Negro. Be it by whom it may, this extremely rich chapel was begun in 1608 : its plan, that of a Greek cross, 34 feet long, and 69 wide ; it has seven altars, and forty-two columns of Brocatello marble, with niches between them, adorned with statues : the architecture is solemn, and it is altogether one of the best specimens in Naples. The greater part of the paintings are by Domenichino, except those in the cupola, which are by Lanfranco. Here are preserved all the relics and silver statues of the numerous tutelary saints of the city : those of St. Januarius are the most favoured. One of these, a vial, which contains his blood, liquefies twice a year, on its being held up to the head of the saint. To the father Francesco is also attributed the church of Sant' Andrea della Valle, at Rome. In 1622 he made a design for the church of the Santi Apostoli, at Naples ; and afterwards built that of Santa Maria degli Angioli, at Pizzo Falcone, which also belongs to the Teatini, and is perhaps the best-proportioned edifice in Naples.

GIACOMO DELLA PORTA, A MILANESE.

THIS artist, who originally worked in stucco, studied architecture under Vignola; and becoming the architect of St. Peter's, he executed the idea of Bonarroti, in vaulting the cupola, which gives to modern Rome a superiority over the ancient city. In every age cupolas have been in use, as we see in the temple of Minerva Medica, and the Pantheon, at Rome. These, although sufficiently elevated in the interior, are flat and ill-built externally; which is also the case with that of Santa Sophia at Constantinople, of St. Marco at Venice, and the Agostino at Rome. Those of Pisa have the disagreeable Gothic contour, from which Brunelleschi has not departed very far in his celebrated cupola of the cathedral at Florence, having placed one ingeniously within the other. Michael Angelo made the design and model for that double cupola of St. Peter's, in which is united grandeur, beauty, and originality—the three greatest qualities of the fine arts. Sixtus V., who aimed at celebrity, particularly in the embellishments of Rome, commissioned Giacomo della Porta, first architect, and Domenico Fontana, to raise the cupola. In twenty-two months, 600 persons, working continually during the day, and sometimes during the night, completed it; and the world has never since seen its equal.

These two architects gave a little more height than was in the original design of Michael Angelo, both to the interior and exterior cupola, though it is said that they did not alter the design of the latter. Hence has arisen the idea that Bonarroti was himself incapable of making one more elegant than that of Brunelleschi over the cupola of Florence; the lantern of St. Peter's is also very inelegant,

particularly with regard to that corona of candelabræ over the entablature. It is, however, executed according to the model made by Michael Angelo, and which is carefully preserved in St. Peter's. The greatest defect in it, is its columns resting on the weakest part of the cupola.

It was then determined not to place statues over the columns round the drum, perhaps justly, to avoid too much weight and confusion. Sixtus V., however, placed seven ribs of gilt metal on the side of the cupola that is seen from the front; but they were afterwards removed, to be applied to some other use.

Della Porta and Fontana had the plan and elevation of the cupola delineated on the pavement of the church of St. Paul. These lines are now obliterated, the pavement being composed of irregular and badly united pieces of stone.

The interior diameter of the drum of the Vatican cupola is 139 feet, that of the Pantheon 142 feet 6 inches. From the principal entablature to the eye of the lantern 157 feet, of the Pantheon 148 feet; from the commencement of the drum to the top of the cross 284 feet; hence the lantern, with the cross, is as high as the Farnese palace: from the pavement to the drum is 154 feet. Thus the whole height, from the pavement to the top of the cross, is 438 feet. The height of the cupola at Florence is 400 feet.

Mathematicians have demonstrated that the catenarian is the curve capable of the most resistance for vaultings; because if a vault or arch be made according to the principles of this curve, all the parts support themselves by their own weight, without the assistance of cement. This curve is taken from a chain, or considered as a perfectly flexible thread, charged with an infinity of small weights, and suspended to a vertical plane at the two extremities: a sail blown by the wind makes the same curve. We refer the reader to the Bernulli, who were the inventors of

it, and to Frezier, who studied the construction and properties of it. The learned signor Marchese Poléni did not find the Vatican cupola an exact catenaria, but a little varying from it; he, nevertheless, declared it to be an excellent form: of this we shall speak hereafter.

Giacomo della Porta continued the buildings of the Campidoglio, according to the design of Michael Angelo, and erected the statues on the balustrades. He finished also the church del Gesu, according to the plan of Vignola. This church is decorated with double Composite pilasters, placed so close to the angles of the piers that there is not sufficient space for a well-proportioned archivolt. The pilasters which ornament the four piers of the cupola, and which receive the double arches, appear to have their bases and capitals mutilated. The exterior cupola is destitute of grace; it is too low. The drum is of an octangular figure, which is much less beautiful than the circular one. The façade is very simple, when compared with the interior of the church, which is much ornamented; the pilasters also are small for those within. There are a number of useless projections, and five pediments, one over the other, which are equally absurd. Its principal value is being of Travertine stone. But why was not the design of Vignola followed?

Giacomo della Porta also built the façade of the church of San Louis, of two orders, Doric and Corinthian, a common practice with architects of this time. In the same style are the two which he made for the Madonna de' Monti, and Santa Maria, in Via. The church of the Greeks, in the Strada del Babbuino, is of good form. The palace of the marchese Serlupi, next the Seminario Romano, was built by him. It is a stately edifice, but the windows are heavy, from being overcharged with ornament. This palace remained only half finished; the other half has since been added, and it has any other character

than that of a palace. The elegant palace Grottofredi, in the piazza of Venice, with three orders of architecture, is by him. The first order is Doric, the proportions of the frieze being altered. He also built the Niccolini palace, in the piazza Collonna; it is noble in its simplicity, but there are a number of irregularities in the unequal disposition of the windows, in their proportions and ornaments, and the rusticated sides are not consistent with the plain parts of the edifice: the door is not in the centre, and its opening is too large for the smallness of the columns placed at the flanks or jambs. He began also the Spada palace, at the Corso, opposite the column of Antoninus; but this has since been so deformed, that, for the honour of Rome, it ought to be destroyed. He had also the direction of the fabric della Sapienza; and to the Farnese palace he made the superior windows, with the gallery, looking towards the Strada Giulia, but which little accords with the rest. The majestic Marescotti palace is the work of this architect. He designed a number of fountains, at Piazza Navona, at Piazza del Popolo, at the Rotunda, at the foot of the Campidoglio, at the Madonna de' Monti; but they are for the most part trivial. Among the best, is that within the Campidoglio, in which is the statue of Marforio; and that of the Tartarughe, at Piazza Mattei, so much esteemed for its sculptures.

Finally, he designed the villa Aldobrandini,* at Frascati, which is justly called the Belvidere, and there erected the elegant little palace. Returning thence to Rome, with cardinal Pietro Aldobrandini, he was taken ill, in conse-

* This palace was commenced about 1598, and is reckoned one of the most celebrated in the vicinity of Rome. See "*Choix des plus célèbres Maisons de Plaisance de Rome et de ses Environs, mesurées et dessinées par C. Percier et P. F. L. Fontaini.*"

quence of eating too much melon and ice, and being unable to proceed, was obliged to remain at the Porta San Giovanni Laterano, where he died in a short time, at the age of sixty-five.

VINCENZA SCAMOZZI, OF VICENZA,

(Born 1552, died 1616,)

RECEIVED a good education from his father, Giovan Dominico, who was accustomed to practise himself in laying down plans for cities and territories, and was also well versed in architecture. It is asserted that he superintended a variety of buildings in his own country and the adjacent villages, and that he made the excellent index in the work of Serlio, which certainly bears his name, though it appears to have been by his son. From his father, Vincenzo learnt architecture, and when not above seventeen years of age, made a design for a palace for the counts Oddi, which, although not executed, did him much honour. His real masters were the edifices then erecting in Venice by Sansovino and Palladio. Excited by the fame of these great men, he went thither, observed their work with attention, and thus put himself in the path which in time led him to surpass these artists. He particularly admired Palladio, though in the constant habit of speaking of him with little esteem.

While Scamozzi was at Vicenza, he studied Vitruvius attentively, and at the same time perspective with so much success, that he composed a treatise, divided into ten books, on the subject of theatres and scenes. He was then only twenty-two years of age, and had already acquired some fame. The canons of San Salvatore availed

themselves of his abilities to open the lantern to the cupola of their church, which before was very dark.

In order to improve himself still further, in 1579 he went to Rome, where he studied mathematics under the celebrated father Clavio, and made exact drawings of the best buildings of antiquity, especially the Coliseum, and the baths of Antoninus and Dioclesian, which he published; but this is not a work of much value. He then went to Naples, to study all the relics of antiquity in that city and neighbourhood.

He returned and settled at Venice, and was intrusted, by the senator Marc Antonio Barbaro, with the completion of the monument to the doge Niccolo da Ponte, which Scamozzi erected in the church of Santa Maria della Carita, a work which may vie with any of the most celebrated. These increasing his reputation, he continued the library of St. Marco, which was committed to him, and had been begun by Sansovino. Scamozzi finished it most happily, and added to it the public museum.

He went to Rome a second time with the Venetian ambassadors, whose embassy was to congratulate Sixtus V. on his exaltation to the chair of St. Peter. On this occasion he gained much from the various opinions and inventions of many celebrated architects, relative to the raising the Vatican obelisk. But the great attraction, that drew Scamozzi to Rome, was the ancient monuments, which led him thither a fourth time.

On the occasion of the empress Maria, of Austria, passing through Vicenza, in 1585, Scamozzi was sent for, in order to direct the accustomed festivals. He arranged all the scenes in the Olympic theatre for the *Œdipus* of Sophocles, which arrangements were much to his honour. He made two designs for the great bridge of the Rialto, one of three arches, and the other of one arch only; but neither of these were executed, that of Niccola da Ponte

being preferred. He was equally unfortunate in the church of the monastery della Celestia, built by him after the taste of the Roman Pantheon: it was scarcely begun, before it was destroyed, in consequence of some intrigue. He was, however, more fortunate with Vespasiano Gonzaga, duke of Sabionetta, by whose order he erected a theatre after the manner of the ancients, with the perfect approbation of the learned.

The famous fortress of Palma, near Friuli, is the work of Scamozzi, who had the pleasure of laying the first stone, in 1593, in the presence of the Venetian generals. He was afterwards chosen to carry on the new court of law, in the piazza of San Marco. In this beautiful work, he altered, with what advantage we cannot decide, the intention of Sansovino, and added a third order, which formed the second floor. He, however, did not carry it further than to the side of San Geminiano. Its completion was reserved for Baldassare Longhena, who succeeded him, and closely followed his model.

Scamozzi had formed an idea of writing a work on universal architecture; and requiring a variety of northern information for this purpose, he took advantage of an expedition of some Venetian ambassadors, and travelled with them, in 1600, into France, Lorraine, Germany, and Hungary. Thus enriched with a store of knowledge, he returned to Venice, and was immediately overwhelmed with the duties of his profession. A long catalogue would be occupied in an account of the public and private edifices, of every description, which he was commissioned to execute, not only in Venice, but in Padova and Vicenza, and in other places of the Venetian dominions. Over the grand canal at Venice he built the Cornaro palace, of three orders of architecture, Doric, Ionic, and Corinthian, but it is not executed according to the design ordered by the cardinal Federigo Cornaro. Near Lonigo, for Pisani, he built a square casino, with a rotunda

in the centre, and niches at the angles. The cupola of this hall overhangs the roof of the rooms which are round it: the façade has a portico of Ionic columns, not well arranged, and above is an incongruous pediment. The windows, also, of the casino, which he built for Cornaro, near Castel-Franco, in a place called the Il Paradiso, are badly disposed. That which he built at Padova for Molino, is better arranged. The Trissino palace, also, now called the Trento, which he erected in his own country, in a very confined situation, is a stately edifice, and merits attention; it is near the cathedral. On the Corso is another Trissino palace, also by Scamozzi, and finished under the direction of the noble Ottone Calderari. At Villaverla, in the street leading to the rich Tiene estate, he designed a beautiful fabric for the counts Verlati. He went to Florence, and raised the second floor of the Strozzi palace; and to Genoa, to superintend the Ravaschieri palace, which is of three stories; the first rustic, the second Ionic, and the third Corinthian. He was sent for to Salzburg, by the prince bishop of that cathedral, which was erected after his design; the various designs which he sent to different places at the request of princes and great men, are immense.

Thus occupied, no time was allowed for the work before alluded to, on universal architecture. He had at first divided it into twelve books, he afterwards diminished it to ten, and published it in 1625, with a preface, which promised that number, but there are only six; these are the 1st, 2d, and 3d, of the first part, and the 6th, 7th, and 8th of the second. It is most likely that Scamozzi had also composed the remaining four books; but not having, perhaps, finished them, and anxious to publish those which were completed, he sent a mutilated work into the world, and which always remained so, the author dying in a few months afterwards, at the age of sixty-four. He was buried at Venice, in the church of St. John and

St. Paul. There a suitable monument was to have been erected to him; but nothing was done, in consequence of the litigations arising from his will, in which he nominated as his heir an adopted son, Andrea Toaldo Scamozzi, of the Gregorj family, who erected one in the church of San Lorenzo di Vicenza, his native country, with a foolish inscription, which, among other things, says, that almost the whole of Europe was decorated with the buildings of Scamozzi. Nothing conveys more falsities than an epitaph, unless it be poetical compositions and orations, which abound with the most extravagant encomiums on those who have done little or nothing to merit them. Man generally loses sight of truth and justice whether he eulogises or condemns.

Scamozzi was a great architect, and of singular merit. His works are simple, majestic, and correct. His head was free from arrogance and pride, but vanity was a leading feature in his character; and this it was that led him to clothe his treatise in a garb of such affected erudition, ill digested, and equally ill arranged. His sixth book, however, treating on the different orders of architecture, is a master-piece, and shews that Scamozzi was deeply learned in his profession. D'Aviler has translated it extremely well into French; and Du Ruy has added to it many other matters of importance, drawn from the remaining books of Scamozzi.

Scamozzi made a drawing of the villa Laurentinum of Pliny, tracing it from what he had himself written in one of his letters. On the famous Scamilli Impares of Vitruvius, which has so vainly tormented the heads of the learned, Scamozzi composed a tract, which is, however, lost, together with a treatise on Perspective, and four books of the Universal Architecture.

And here we will take the opportunity of drawing a comparison on the proportions and arrangement of the

orders used by those celebrated professors and writers on architecture, Vitruvius, Vignola, Palladio, and Scamozzi.

PARALLEL.

THE TUSCAN ORDER.

THIS order* is only a more simple Doric; Vitruvius gives it a circular plinth, considering a square one not so consistent; the outlines of his capitals are bold, conformable to the order, and after the taste of the Grecian Doric, on the example of which the architrave is plain. The frieze is too low; it ought to indicate the ends of the beams, which were the origin of the Doric triglyph. The cornice, with its natural modillions, is altogether well formed, simple, and original. The cimatium is improper, and this alone has been imitated by Serlio and Vignola. The Tuscan of Vitruvius has served as an authority for the moderns.

Vignola gave it an outline fitting its character. The base was Vitruvian, that is, circular; the fillet is small, and makes a part of the base, whereas it should belong to the column. The shaft is smaller than that of Vitruvius† and the others, and is not consistent with the solidity of this order. The capital has an extremely good outline, but the astragal and lower fillet are too delicate. The archi-

* A very useful work, entitled "*Nouveau Parallèle des Ordres d'Architecture*," containing specimens of all the orders, has been drawn, engraved, and published at Paris, by Charles Normand, architect, and may be consulted as an illustration to our author.

† Serlio gives six, Vignola and Palladio seven, and Scamozzi seven and a half diameters to the Tuscan column.

trave is slight, and should not be smaller than the frieze. The cornice is well divided by a few large parts ; the small square under the corona does not accord well with its great projection. The principal defect is in placing an ovolo for a cimatium. Vitruvius committed the same error.

Palladio gives three outlines, or profiles, to the Tuscan ; the entablature of one is formed by two beams only ; an arrangement too gross in architecture when deprived of its first rudeness. The members of the other are too minute, although copied from the amphitheatres of Verona, Pola, and various fragments of antiquity. The third is the best, having the Vitruvian capital, with very little projection, and a cornice with delicate mouldings.

Scamozzi is inferior to all in the division of his members. His entablature is too much loaded, and the column too light ; the base is well divided.

This order might be improved by depriving the Vitruvian capital of some mouldings, using the Scamozzi base, and giving 2-7ths to the height of the entablature. It is calculated for rustic and grotesque work, and fountains. The shaft of the column may be rusticated.

DORIC.

AMONG the ancient Doric of Rome, that of the theatre of Marcellus is the most simple. The column diminishes from the bottom, and its diminution is so great, that there is no other corresponding example to be found among the Roman monuments ; the columns being incased partly in the walls, it is not so evident as it would have been had they been isolated. The architrave and frieze are set within the line of the outer face of the column, that this great mass

of building may insensibly diminish; but the upper Ionic is the contrary. It is observable, that the Romans applied the Ionic abacus to the ancient Greek Doric. This, with the addition of the three square fillets under the ovolo, is an unhappy introduction. An example of this is seen in various fragments; also in a sepulchre near Terracina, &c. The undivided architrave is excellent, the frieze is proportionate in its height, of a module and a half, the capital of the triglyph included. The projection of the cornice seems too much, being greater than its height; this defect is more conspicuous when we consider it as an order placed under another. The inclination of the soffit would be more appropriate in the sides of a pediment; it is, however, objectionable in any situation, although many have adopted it, from an idea of its having a good effect. The small curve under the corona creates confusion, and is badly placed. The cavetto, which crowns this order, is proper, and is appropriately called the Doric cimassium; here it is, however, too large, when compared with the corona and other mouldings, some of which are extremely small. Notwithstanding the defects, this is the best arranged Doric of antiquity, and has justly served as a model for the most celebrated modern architects; who have, however, with equal reason, not copied it exactly. It might be easily improved, and then employed in simple edifices.

The Doric of Albano, described by Chambray, and which no longer exists, may be considered a bold and noble example, without the addition of any more ornaments. The capital and architrave have too many listels. The cornice is majestic, both in its small and large parts. The soffit is filled up with roses and drops, in the manner of modillions, a practice common in various monuments of Greece. The fluting of the triglyphs is stopped, as well below as above, and is consequently not natural.

The Doric of the Dioclesian baths, described by Cham-

bray, but of which there are no remains, has an entablature of so much richness and elegance, that, but for the triglyphs, it would form an Ionic. Altogether this may be considered as the most sumptuous of the Doric order; and, in the interior, might be used for extraordinary decorations in great festivals. The worked dentels, of which the antiquities of Rome furnish a number of examples, cease to be dentels, and are converted into a sort of fret ornament: they are therefore preferable to the true dentel, and may also be used in the Corinthian cornice under the modillions, where great richness is required. The cimasium of the architrave is delicate, and projects like that of the Albano Doric. The capital is too rich.

In the Doric of Vitruvius there is much simplicity, but also a little stiffness; but whether this be the fault of Vitruvius, or his commentators, we cannot say. The mutules of the cornice and their soffit are inclined, and the dentels are purposely omitted.

Vignola has composed two Dorics, one in imitation of that of the theatre of Marcellus, in which he has deviated but very little from the general admeasurements, only varying the dimensions of the members according to their proper proportions: a method he usually adopted in the selection of all his ancient outlines. He has reduced the cornice and architrave, to give a more stately effect to the frieze. His triglyphs do not project sufficiently to render the flutings of a proper depth. This defect, which is very visible in some examples, is not so in the theatre of Marcellus. If the metopes were required to be ornamented, the triglyphs should be made a little more in relief.

The other Doric was composed by Vignola from various fragments at Rome; two outlines of which Serlio has given us; and a more beautiful example than this has never yet been seen. It is much lighter than the first, but the

general admeasurements are the same. The base, from its simplicity, agrees with it much better than the attic, but it projects too much; on which account it is liable to injury. The capital has not the three small squares; but, altogether, it is richer than the preceding example. The architrave is improperly divided into two bands. The triglyphs are only slightly raised, as in the other, and their capital projects above them. The effect would be better without this projection, which shews the superior listel much above the metopes and the angles. This member should always form a part of the cornice and not of the frieze, because it has no connexion with the square of the metopes. The projection of these cornices of Vignola is too great; but they might easily be diminished by removing the useless listel under the soffits.

Palladio has treated the Doric with his characteristic simplicity; but, led by the current of opinion, he has placed an attic base under it much too elegant for so solid an order. He proposed various proportions, which he wished to adopt, without a base; but, more from a respect for Vitruvius and the ancients than from persuasion, he never had the courage to omit it. When the columns are on pedestals, and encased in the walls, he makes them more lofty; but such alterations should never destroy the proper character of the order. The column is contracted an eighth, which gives a solidity and consistency to this order. The cavetto under the projecting part of the cornice is improper. The modillions are omitted. This cornice is, therefore, useful in concaves and polygons, and where the modillions occasion an irregularity in the soffit.

Scamozzi calls this order Herculean, on account of the strength required throughout all its parts, and yet he makes it excessively rich and light. He would have an attic base, and almost more ornament than would be allowed in the Corinthian. The flutings, in number

twenty-four, have an Ionic appearance; they are not deep, in order that the plain surface may be more solid. The contraction of the column is too great for so robust an order, as is also that of the theatre of Marcellus, and of various other specimens of antiquity: but example must not prevail over reason; and Scamozzi might have spared his censure on Palladio's contraction, which is by far the most reasonable. The capital, instead of a repetition of small members, has a *gola reversa*, as in the Coliseum. Two others are named, one with small squares and the others with roses, like that of Vignola. His architrave is higher than the others, and rightly, that it may be stronger, and give height to that which, from the extreme diminution of the column, loses in width. The cornice is an imitation of that of the baths of Dioclesian, with the useless addition of a *cavetto* under the corona. The soffit is level, and the drops of a natural figure.

From an examination of the best Doric, ancient and modern, one might be composed exempt from all the above-mentioned defects; combining the stateliness of Vignola with the grace of Palladio, and, in the entablature, the peculiar character of Scamozzi.

In this rectified Doric, the height of the column might be equal to Vignola's, or eight diameters; remembering, however, that it is susceptible of variation by about a diameter, as in the other orders;—a spacious field, in which an able architect may display his abilities, according to the variety of edifices and situations.

Whenever it is requisite to adopt a base, that of Vignola is the most convenient, by diminishing the projections a third of a module, in order to prevent confusion. This base may, according to circumstances, be sometimes rendered more delicate, and should always be more simple than the attic.

The diminution of the shaft may begin from the foot, and,

following Palladio, be confined to an eighth, conformable to the character of this order, which must have the appearance of strength in all its parts, particularly in the columns. The shaft may have channels, which should not exceed twenty, and these may have fillets or not.

In the capital, the usual outline may be preserved; observing always that the projection must not be greater than that of the base, in order that the columns should not touch one another, but have a distance, or interval, of two or three minutes.

The architrave must always consist of one face; the frieze must be sufficiently raised to prevent the projection of the architrave from concealing a part of it, and making the metopes appear as if oblong. The channelling of the triglyphs and the drops must be natural; and the tenia, both above and below the triglyphs, should have no projection.

The cornice with the modillions should not be so high or so projecting as that of Vignola, nor should the cimassium be wanting, although disapproved by him.

The Doric soffit, as it has been hitherto used, does not appear in unison with the beautiful arrangement of this order; abounding with small listels, squares and oblongs, rhombs, triangles, with a disagreeable multitude of heavy drops, and fulmine, the very name of which is terrific. That of Albano is treated with more solidity; and its only objection are the little oblong compartments containing roses, which, however, are distinct, because they are advanced to the very edge of the corona.

In the ornaments of the soffits, an excess of parsimony would be preferable to a superabundance, because, not being much lighted, and seen from below or underneath, a crowded and confused effect is produced.

To render the compartments or divisions of the planceer square, the modillions must commence immediately over

the frieze, as was practised by M. de Veau in the Composite of the Thuilluries, which produces some regularity in the soffit, a greater depth of shadow, and a more natural effect.*

IONIC.

OF the four orders which decorate the superb mass of the Coliseum, the Ionic has the best proportions, both as a whole and in its principal parts. The base is lower than usual, and its small projection is commendable, as it does not overhang the inferior parts of the pedestals. The shaft diminishes from the foot, and its diminution is 10 minutes, — a medium between the general diminution, but without any relation to the Vitruvian eighth, while the lower Doric only diminishes 4 minutes and a half. The whole of the capital is well formed; its volutes may be said to be merely sketched, while the Doric below is more finished, and the Corinthian above still less expressed than the

* The specimens of Doric above cited are all taken or designed from Roman examples, and were applied by the architects of Italy to the decorations of those splendid buildings raised after the restoration of the arts, and which have long held the world in admiration. The true, or Greek Doric, is by no means adapted to any other purpose than to the elevation of a temple; however it may be necessary, for the sake of continuing the parallel, to state the proportions of the latter, drawn from the best examples of antiquity. The column is six diameters in height, has twenty flutes without fillets, diminishes a fourth, and has a capital of half a diameter in height. The entablature is a fourth of the order, and is divided into four equal parts; the upper one is given to the cornice, and the others divided equally between the architrave and frieze. The inner edge of the angular triglyph is placed in a vertical line with the axis of the column, the metopes are square, the column has no base, but rests upon three steps. The best examples are those of the temple of Theseus and the Parthenon.

Ionic; a well-arranged gradation in so colossal'a work. The architrave, frieze, and cornice, augment in height as they ascend in the building; a rule used by Vignola. The faces of the architrave are inclined inwards, which rule is not followed with the corona or dentels above, nor does it agree with the doctrine of Vitruvius. This inclination is not observable in any other of the ancient monuments, either in the entablatures, the imposts, the archivolts, the pedestals, nor in the interior and exterior. The practice has been embraced by the moderns, to increase the projection of the various profiles, and to render the parts more or less distinct; an unfortunate expedient. The frieze, also, in the foregoing example, is not plumb with the shaft of the column; which is contrary to the Doric in the theatre of Marcellus. The outline of the cornice is by no means correct; there is not sufficient harmony in its members, and it too closely resembles that of the Doric.

The Ionic of the theatre of Marcellus has a simplicity and grandeur conformable to the situation and mass of the edifice, but not to the character of the order, which should be between the simplicity of the Doric and the delicacy of the Corinthian. The base is higher, and projects more than that of the Coliseum. The shaft is as much diminished, but the contraction commences at about a third. The capital is more finished and higher than the antecedent: its abacus is also increased. The faces of the architrave incline forward, and the inclination is directly towards the shaft of the column. The receding of the frieze is also greater than in the antecedent; the cause of this is the placing several orders over each other; this is not the case in the inferior order of the same edifice. The dentels correspond exactly with the ovolo and the centre of the column, an exactness not common in antiquity. The projection of the cornice is much less than its height, or

that of the Doric below; whereas it should be quite different, in order to produce a unity in the edifice, and to protect it the more securely from injury or rain.

The Ionic of the temple of Fortuna Virilis is a model of the true Ionic character, both in its general relations and in the distribution of its ornaments: it is not, however, without its faults, from which it was purified by Palladio and Chambray, who accommodated it to their tastes. The column diminishes an eighth; if it were a seventh, according to our method, it would be more adapted to the half solid character of this order; it commences from the foot, and its twenty-four channels are well imagined. The angular volute is similar to that of a vestige of antiquity in Ionia. The capital appears entire on whichever side it is looked at. The moderns have done rightly in making the angles of the volutes equal, in imitation of those at the temple of Concord, and other fragments mentioned by Piranesi in his "*Magnificenze de' Romani*." The principal parts of the entablature are not well arranged. The architrave is low, its faces small, and almost equal. The frieze is also low, and appears more so from being ornamented. The cornice is too high, and does not project sufficiently. The entire disposition of the mouldings is very proper, but they are not harmonious in their relations. The cymasium is too large, the corona too low, and almost equal to the goletta above it. The dentels do not correspond with the rest of the ornaments, some fillets are too small, some too large: that above the corona is useless, as is also that attached to the frieze, as well as the cavetto above the dentels. The ornaments are not one over the other; and the lions' heads, of which Vitruvius speaks, should be corresponding with the level of the columns. The outline of the architrave is monstrous, and the fascias very much inclined. This inclination, which is often observable in the parts of the architrave, were given to them that the frieze might not be increased in thickness, which other-

wise would extend almost beyond the abacus of the capital. The reason of the great thickness given to the frieze was, perhaps, necessary for the better support of the parts above, as in the Coliseum and the theatre of Marcellus, or the better to shew the ornaments, as in this: but whatever may have been the reason of the ancients, the effect will always be disgusting, and contrary to the appearance of solidity.

The Ionic of Vitruvius has nothing particular, except a heavy base called Ionic. It has, however, as well as the Corinthian, the attic base, but projecting excessively.

In this order, Vignola has used the general relations of the orders above referred to. His capital is the ancient, but in his buildings he has commonly practised the angular volute. The principal divisions of his cornice are after that of the Coliseum, that is, they increase as they ascend. Although the architrave has three faces, it is very justly exempt from decorated astragals. The frieze is higher than the architrave, as it should be only when ornamented. The cornice is like that of *Fortuna Virilis*, but without its defects. In short, Vignola's entablature is in the most perfect taste. The channels are terminated at the bottom, in imitation of those of the Sibyls' temple at Tivoli, and many others of the Grecian Doric; but they were never practised by him, being unnatural. The base is Ionic, which, from a servile respect for Vitruvius, was adopted by Serlio, Barbaro Catanio, Viola, Bulant, and many other of his followers.

Palladio has employed the attic base, but with one astragal more, to distinguish it from that which is improperly applied to the Doric. His capital is similar to the ancient, and to that of Vignola, but, perhaps, has better relations. The architrave is Corinthian; and the convex frieze too small. The outline of the cornice is excellent; it has suitable modillions, similar to those of the temple of Concord, notwithstanding the authority of Vitruvius,

who makes the dentel the essential characteristic of the order. The only defect of this cornice is, having so delicate a cavetto placed under so great a weight. The whole entablature is a fifth of the order. It would have been better had this approach to the Corinthian been omitted, and the peculiar characters been left more distinct. The modillioned cornice appears, from its solidity, more suited to the exterior than the interior, contrary to that of Vignola.

To make an elegant and perfect Ionic, the Vignola proportions should be adopted to the Palladian outline for the exterior, and those of Palladio to the outline of Vignola for the interior; and by adopting the medium proportions of these two great men, a good effect cannot fail of being produced.

In his general relations, Scamozzi approached those of Palladio; as also in the base, which he covered with ornaments. He distinguished himself in his capital, which, from its angular volutes, may be easily employed in any figure. His cornice is small, and composed of so many small members that it appears Corinthian. He gives a fillet to the dentels, and would have the modillions adopted in large edifices, perhaps to obtain greater projections and more shadow; but his modillions being small, they certainly do not produce a good effect.

From the Ionic specimens above cited, a rectified one might be produced; the column nine diameters high, and the entablature two-ninths, which is the medium between the Doric and Corinthian. The shaft diminishes from the foot, and its diminution should be a seventh; it would thus be more delicate than the Doric, which is an eighth, and stronger than the Corinthian, which is a sixth; if channels are required, they should be twenty-four in number, and gracefully carved. The Scamozzi capital has the abacus longer, in order to cover the volutes; and a flower, or some leaves, to conceal the vacuum left by the volutes. The architrave may be equal to the frieze. The

cornice higher or lower, according to the use for which it is destined. The modillions, for example, should be of greater height than the dentel band, in which case the dentel is not to be cut; and this is still more necessary for the sake of simplicity. The first cornice may be used to crown great edifices on the exterior, and in the last story; the second may be less, because used in the most inferior stories, and in the interior; and the third still less, to ornament doors, windows, and the interior of apartments. Thus, convenience and taste should combine in selecting from these cornices, which have been used both by ancients and moderns of the best taste. An Ionic capital might be formed without volutes, the origin of which we cannot account for.*

CORINTHIAN.

THE Corinthian of the frontispiece of Nero has the attic base higher than usual, perhaps for the convenience of situation or the quality of the edifice, it being supposed that this frontispiece made a part of the temple of Jupiter

* Vitruvius reports, that the Ionic capital was made in imitation of the curls in the head-dress of females; but more probably they were taken from the horns of rams, from the spiral forms of some sea-shells, or the cornia ammonis, which they more resemble. The dentels in the cornice are said to represent the ends of the smaller timbers to which the covering tiles were affixed. The height of the Ionic column, as used by the Greeks, was generally eight diameters, and the shaft was cut into twenty-four flutes, with as many fillets. The entablature was two diameters in height, but in works of magnificence it ought not to be less than a fourth of the height of the column. It is divided into five parts; two are given to the architrave, the remaining divided again into five, three of which are given to the frieze, and the remaining two to the cornice. The whole height of the capital is three quarters of the upper diameter; and that of the base, including the plinth, half a diameter.

on the Quirinal. The fillet under the upper torus projects almost as much as the member itself, to avoid its being concealed on a near view. Serlio gives a rule for altering the fillets, according to the position of the base, whether above or below the eye, in order that all the parts should be visible. The shaft no longer exists, but Palladio tells us that the entablature is a quarter of the order. The pilaster still remaining is conjectured to have been one of those at the angles of the temple, because it is diminished to receive the architrave, without allowing the soffit to overhang, as in the Pantheon. This pilaster is plain, as were most probably the columns. The leaves of the capital rise out of the shaft, and their number is greater than usual, producing a degree of confusion, as in the pilasters of Palmyra. The entablature, from the small number of its parts, is the most simple of all the Corinthian cornices; and has a surprising majesty, well corresponding with the grand mass which it crowned. The architrave, equal in height to the frieze, has two fascies; but the three ornamented mouldings in the cimasium produce confusion; the other ornaments are distributed with wonderful taste. The rich frieze corresponds with the grandeur of the whole. It is to be observed, that the ground from which the scroll is relieved is not immediately over the architrave and shaft, the ornamental foliage projecting only to that line.

The cornice is composed of three large and necessary parts, with which, however, their small mouldings and minute ornaments do not agree, but rather detract from the grandeur of the whole. It is nevertheless true, that an ornamented moulding, however small, makes more separation than another larger and plain, because the latter does not receive so great a quantity of shadow as the former. The modillions, as in many other ancient edifices, do not correspond with the centres of the columns.

Palladio gives an account of another profile similar to

this superb one, which he supposed was the temple of Mars; but there is nothing to point it out to us, nor does Deyedetz mention it.

From this species of entablature the modern architects have copied the one characteristic of the Composite order, although the ancient Composite has only a Corinthian entablature. But if this entablature has been taken away from the Corinthian, as being too strong, why should it be insisted that the Composite order is the most slender? Scammozi alone has ranged it under the Corinthian, at the same time giving it a more minute cornice than that order.

The real use of this entablature is to crown the buildings erected after the Corinthian or Ionic style, whether the orders are used or not.

The portico of the Pantheon presents the best proportioned Corinthian of antiquity. Its base is the usual ancient Corinthian, too much loaded with small members, and exposed to injury. In the capital, the abacus is an eighth instead of a sixth, which is generally given. The leaves of the olive project more than in any other example; but they are extremely well worked, as are also the capitals of the interior of the temple. The entablature is a fourth of the height of the column, the usual practice of the ancients. The cornice has small and very distinct members: the corona appears small; and the modillions are not plumb. The dentel band is plain, as it should be.

The Corinthian of Jupiter Stator in the Roman Forum, is an example of the most exuberant richness and exquisite taste; if the frieze had also been ornamented, confusion would have been produced. The proportions are majestic; the mouldings harmoniously disposed; the ornaments distributed with the greatest regularity, both with regard to themselves and to the general arrangements, producing an effect rarely to be met with.

The base is the ancient Corinthian, with the addition of an upper astragal, but the composed attic, as used by Palladio and Scamozzi, is always preferable. The contraction is a seventh, and commences at about a third of the height. The shaft has twenty-four flutes. The capital is the richest among the Roman remains: it is most beautifully worked, and its leaves do not swell beyond the shaft. The lower leaves are olive, and those which adorn the abacus are acanthus. It is singular, that in all the antiquities of Italy, the middle fascia of the architrave is ornamented, and the other two plain, as if intended as foils, to shew the beauty of the former to more advantage. We have a similar example in the ruins of Palmyra, where, however, the upper fascia is the one ornamented. The lower fascia is inclined inwards, and gives an idea of solidity, although that portion placed on the capital is almost as wide as the shaft of the column. The cornice is rather too lofty, and somewhat defective in its projection. It has two ovolos equally ornamented, but at a distance from each other, and well situated. Those of Jupiter Tonans are nearer each other.

In the temple of Peace there are very unfortunately three. In cornices are often found a tiresome repetition of two or three similar mouldings, as *golæ*, *reversæ*, or *ovoli*. To avoid this, they should be situated at some distance from each other, at different heights, and decorated with various ornaments. The soffit of the cornice of Jupiter Stator is ornamented, as is also the corona, with a variety of channels. This causes confusion when looked at from underneath. The cornice of the temple of Antoninus and Faustina, where the soffit is plain and the corona ornamented, has a much better effect; and where the soffits are enriched, the coronas should never be so.

Vitruvius does not give any proportions to the base or entablature of this order, nor any characteristic distinct from the Ionic. To the capital alone he gives one diameter,—a

practice always observed by the Greeks. The outline of the entablature is of a medium character, and therefore more adaptable to the Ionic. It is without modillions, which, however, Vitruvius mentions as belonging to the order.

Vignola professes to have formed his Corinthian from that of the Pantheon and of Jupiter Stator, and gives a reason for the propriety of the modillions, and the correspondence of all the parts with them. The compartments of his soffit are square, and he has sculptured the dentile as in Jupiter Stator, and not as in the Pantheon, where the dentile band is uncut. The general division of the entablature is good, the architrave equal to the frieze; but the cornice projects too much. The height of the entablature is a quarter of the order, whilst, according to the Corinthian character, it should be only a fifth, as Palladio and many others have made it; but both have their advantages. The Vignola entablature produces a magnificent outline, and is consequently peculiarly fitted to crown the exterior of edifices, especially when there are other orders beneath it. That which is composed of smaller parts is more fitted for the interior and smaller orders. The capital, however, is not well-arranged; all the leaves are thick, and project beyond the shaft: those of the second row project too much, and the sides of the caulicoli are finer at the commencement than at the finish. The contraction is a sixth, the greatest diminution that can be admitted of.

Palladio has with great reason preferred to the Corinthian base, with two scotia, the composed attic, which was also used by the ancients; it is as solid as the simple attic, and at the same time richer. The diminution is an eighth, as in all his other orders. The capital is exempt from the defects observable in that of Vignola, the bell corresponding with the depth of the fluting. It is true that the entablature is not plumb with the bell, as is the case in that of Vignola; but this is not a defect, because the bell widens so much at the top, that it projects beyond the

architrave, and the leaves do not overhang too much. The admeasurements of the entablature correspond exactly with a fifth of the column. The architrave has a repetition of three astragals. The frieze in all his orders is a fourth less than the architrave. If Palladio had made the columns 20 modules high, his entablature would have been a fifth higher, and of more importance, like that of Scamozzi.

In the Corinthian of Scamozzi, the base is similar to that of Palladio: it is well divided, and has a better outline; it however projects too much, and is too much ornamented. The capital is quite Palladian in form: it differs in the ornaments of the abacus, which is entirely enriched with ovoli, which require a tile or species of tablet over the abacus, to avoid its being broken by the weight above, as we almost always see practised among the ancients. The flower of his capital is natural, and better conceived than the others. The cornice is without dentels, or that member in which the dentels are generally expressed, but it is occupied with a variety of mouldings in a very bad taste. The projection of the entablature is poor, and the compartments of the soffit still more so. The mouldings are alternately enriched, and thus disposed in order that each should appear distinct. The general proportions are the same as those of Palladio. This order might be improved, by giving it the base of Palladio and Scamozzi, contracting the shaft a fifth, and adorning it with twenty-eight flutes. The capital should be after that of Palladio and Jupiter Stator, embellished throughout with the same sort of leaves, and those of the most natural form. It is always better that the two ranges of the large leaves should be of the same height, in order that the projection of the inferior should make those above appear smaller, as is the case in nature. Those called olive leaves are more distinct, and therefore preferable in great works: the acanthi are more fitted for

those of a contrary description, being smaller in their foliage. The leaves of the laurel are stately and distinct, and therefore suited to lofty situations, and to festive and triumphal decorations: each branch may contain three or four leaves, and in the centre may be placed fruit of the same species. The oak may be applied to the same uses as the preceding; and there are few situations in which the palm may not be used instead of the olive. In all times artists have been desirous of enriching architecture with new ornaments, more particularly from the vegetable kingdom: they are, however, far from imitating nature; instead of which, they employ badly assorted productions, and not unfrequently those of fancy only.

It sometimes occurs that the Corinthian is used with undivided leaves, particularly in small orders, as in the temple of the Sybil at Tivoli; the arch of Trajan, in the temple of Bacchus; and occasionally in great structures, as in the Coliseum. Various outlines are therefore required, more or less rich according to the variety of situations.

The principal feature in the Corinthian capital is the projection of the leaves, and which form its chief beauty. We see some extremely delicate project so precipitately, that they almost break, and this is according to the method of Vignola and Scamozzi: the smaller projections are after Palladio. The Scamozzian method, which is the most easy, might be adapted to the Palladian projection, which is the most natural.

The projection of the caulicoli should be equal to that of the bell, and the stalk from whence the caulicoli proceed may be plain, or vertically or spirally fluted, but must never have mouldings which are unnatural. The number of the leaves should be eight large ones in a range, and one small for each caulicolo. The caulicoli should be large, thick at their commencement, and gradually diminish towards the top. The shaft of the bell

should be in a line with the back of the fluting, or at least should sink back to make room for the leaves, which should not extend beyond the shaft of the column.

The best proportions of the Corinthian are between those of Vignola and Scamozzi. The entablature should be a fifth of the order, with the liberty of extending or reducing it, as might be requisite; the architrave equal to the frieze: and in order to multiply the members of the cornice, it may be made larger, without departing from the magnificent Nero outline, by removing those members, useless in themselves, and as uselessly repeated, by avoiding a minuteness in the ornaments, by rendering the soffits regular—in short, by introducing all the best parts of the antecedent examples.

The outline of the Antoninus and Faustina order may also be used, and accommodated to our richest edifices, though not to very large works, because this cornice not having modillions, cannot project sufficiently to preserve the building from wet. It may be also used in the interior of temples, apartments, and courts, but always with the prescribed limitations.

In small edifices, in doors and in windows, the Corinthian of the tabernacles, and attic of the Pantheon and of the temple of the Sybil, may be used.

The Composite of M. de Veau in the Thuilleries, which is very stately, looks to advantage in carvilinear figures, and in the interior of rectangular ones.*

* The Corinthian order does not appear to have been very generally used by the Greeks: it was almost exclusively employed by the Romans, and among the remains of their stupendous and mighty structures we must look for the best examples.

COMPOSITE.

THE Romans made little distinction between this, their order, and the Corinthian, as appears in the baths of Dioclesian, where, of eight equal columns employed in the same place, four are Corinthian, and four Composite. Michael Angelo also has done the same thing in the Vatican, where the small order of the tribunes is Composite, and that of the small naves and of the altars Corinthian, while the cornice runs throughout the whole of the same height. Vignola has used the ancient Corinthian base to this order, without the repetition of the two astragals, but with too much projection. The architrave is taken from the frontispiece of Nero, and the cornice is similar to that of the arch of Septimius Severus. The proportions are Corinthian, but the whole has more the effect of belonging to the Ionic.

Palladio assigns to it the Corinthian proportions, but gives one module more to the columns, in order to obtain a higher entablature, which gives it a masculine aspect, and contrary to the delicacy of the column. In the capital, the projection of the leaves is the same as in his Corinthian, and the volutes as in his Ionic. The base has not a good effect.

To make this order between the Ionic and the Corinthian, Scamozzi gives the height of the column a medium between the two, and to the entablature a fifth; but composes it of so many small parts, that it becomes disagreeably minute. The volutes of the capital are Ionic, and the projection of the leaves in the style of his Corinthian. The base is also Corinthian, but with one astragal less, and is better treated than that of Palladio and Vignola.

PEDESTALS.

VIGNOLA assigns a third of the height of the column to all his pedestals, but they are too high, particularly if they are isolated, or project: their small bases are contrary to his magnificent style.

Palladio makes them a little more than a fourth of the column in height, and his outlines are good.

Scamozzi gives a fourth to the Tuscan pedestal, and a third to the Corinthian, wishing that the pedestals of the other orders should be the medium between these two extremes; but his outlines are ungraceful, having mouldings much ornamented, and of a very ordinary contour.

ARCHES WITHOUT PEDESTALS.

THE lower arches of the amphitheatre at Verona, which are considered Tuscan, are 12 feet wide, and $23\frac{1}{2}$ high, which dimensions are proper for the character of this order; but the upper ones are out of proportion, for instead of being higher, they are lower.

Vignola, in all his arches without pedestals, makes the opening two squares high, which is contrary to the respective characters of the orders. The piers of his arches are half a module wide, and therefore so narrow, that they admit only of a meagre archivolt. The depth of the arch is contrary to all solidity: there is not sufficient room for the keystone. The division of the wedges is irregular, and it would be still worse if the archivolts were placed there. These defects might easily be repaired, by making the

centre intercolumniation ten modules instead of nine and a half, the width six and a third, and the height twelve and a third: the small piers would then be twenty-five minutes, and the key one and two thirds; thus all the parts would be regular and in proportion.

Palladio, who has given pedestals to all his arches, has made the Tuscan rather awkward, by having placed it on a plinth of one diameter. The key is not very high; the small wings or piers are wider and better than those of Vignola. The imposts are too rich, and, from their great projection, cut the columns too much, which are half encased in the piers.

Scamozzi has reasoned better than any other on the proportions of arches, and has adapted them to the particular character of each order. He has, however, altered the height of the columns, and formed the outline of the cornice in such a manner, that the intervals between the modillions correspond with the width of the arches. This is the reason of his outlines being bad. His imposts are defective like those of Palladio, although his columns are encased less than a half.

Among the Doric arches, those of the Coliseum are too wide in the intercolumniations with relation to their height, although, from the triglyphs being omitted, they might have been well proportioned. The rotundity, however, of this edifice does not, on looking at it, shew the defect in more than two or three arches; the others vanish by degrees. Hence, in circular figures, it is not so very essential that the arches or other openings should be so light; but when a beautiful form can be produced, it is always desirable. In those of the Coliseum, the space between the architrave and the top of the arch is too great: the archivolt is small, as is also the impost, which projects too much, and beyond the axis of the column.

In the theatre of Marcellus, the arches are all of an

opposite description, that is, too light, without archivolt or key-stones, the imposts too projecting, although less so than in those of the Coliseum.

Vignola has adopted the intercolumniations of the theatre of Marcellus, but without making key-stones, perhaps on account of the want of sufficient space. The archivolt and side piers are bad.

Those of Scamozzi are well-arranged, excepting in the imposts having too much projection and too many members. The key-stones might be heightened, by placing a plinth under the bases of the columns.

The just proportion of the arches is rendered difficult in the Doric, on account of the arrangement of the frieze, the interval of four triglyphs being too narrow, and that of five too wide. The first has insurmountable defects. The second may be practised to advantage, since the interval of five triglyphs requires twelve modules and a half, that is to say, half a module more, and this overplus may be comprehended between the space of the intercolumniation. Sebastian le Clerc imagined he had repaired this defect, by reducing the frieze to a smaller division,—an expedient not the most successful in all cases.

In the Farnese court, the division of the frieze is not regular. The order is placed on a plinth, one module high; the apertures of the arches are less than double; the keystone is narrow; the small piers and the archivolt are too small; the impost disproportionably large, and of such a projection, that it cuts the columns beyond their axis, and almost conceals them.

To avoid this difficulty, it is necessary to observe whether the Doric is under or above other orders. In the first case, the entablature becomes an architraved cornice, as in the Pitti court at Florence, and thus every obstacle is removed. Or, if it be necessary to preserve the entablature entire, the two best remedies are, either to place a plinth of two modules and a half high, or to diminish the height

of the frieze, or the entire entablature in the same proportion. The first expedient may not answer in all cases, as it sensibly alters the height of the columns : the second is more proper, because the alteration is a slight deviation from that of Le Clerc, and reduced only fifteen minutes.

The only remains of ancient Ionic arches are in the Coliseum, and which are even more heavy than the Doric and in the theatre of Marcellus, in which they are more regular than the inferior Doric.

Although Vignola has not insisted on the use of modillions, he has followed the same proportions in this as in the other orders. The situation of the key-stone is narrow, as in his Tuscan. The rest is as in his other arches.

Scamozzi has reduced all the parts, and neglected the solidity of the piers, which of course become weaker as they are increased in height, and consequently require additional thickness.

The Corinthian arches in the third order of the Coliseum, are more awkward than those below.

Vignola makes this arch of the same proportions as the Tuscan, and, for the first time, places the key-stone there, whether for ornament or as a necessary support to the architrave, we cannot determine.

Scamozzi, who placed this order above the Composite, gives it the utmost delicacy of finish ; hence the openings are too narrow, and the piers not sufficiently strong.

ARCHES WITH PEDESTALS.

THESE are used where there is a great opening, as in triumphal arches, the gates of cities, and other magnificent approaches. In these cases, the pedestal becomes a necessary basement, to preserve the column from injury, and to make the ornaments more conspicuous. Care must

be taken that the height of the pedestal is not too far above the eye of the spectator, in order that the base of the column should not be covered, in which case it often occurs that the fault is remedied by more plinths, as we frequently see used both by the moderns and ancients.

In this sort of arch, Vignola gives greater width to the piers than in those of the arches without pedestals, and justly, because they are higher; they should be still wider, especially in the Ionic and Corinthian. He has neglected to proportion the imposts, the key-stones, and the arch-volt.

Palladio has not given his accustomed thought to the arch of this description. The piers are narrower than those of Vignola; the imposts have too many members, and too great a projection; consequently they overwhelm the column, which is half sunk in the wall.

Scamozzi diminishes the size and width of the piers, in proportion as they are higher, which is contrary to solidity. His imposts are also too loaded, and too projecting. Under the Corinthian impost he places a half capital of the same order; for this, it would be difficult to find a plausible reason. Scamozzi is the only man who has given, as a precept, the raising the centre of the arch, in order to shew the whole of the curve.

Instead of pedestals, it would always be better to use plinths, both externally and internally, and as low as they can be made, certainly not more than a fifth of the opening.

The result of the parallel is, that Vignola has selected the grandest features of the antique, whence he has shewn a stately manner, a good taste, and an easy outline.

Palladio, noble and reflecting, takes a middle course with regard to the dimensions of the ancient monuments, and is therefore less delicate than Vignola.

Scamozzi does not design with the ability of the preceding masters. Harsh, minute, obscure, regular in the characteristic proportions of each order, but extremely

rich, and though a censor of Palladio, he imitates him more than any other, and, where he cannot be a copyist, is inferior. He recommends purity in the ornaments; prescribes that the ornamented parts of the orders should be the superior, and not the inferior, because those are subject to injury and dirt, and, having to support the weight above, should also be the strongest. He teaches that ornaments are suitable to the Corinthian and Composite; he does not entirely object to them in the Ionic, and gives very few to the Doric: and, after so many fine precepts, he has practised entirely contrary.*

* The arch of Titus at Rome is one of the best specimens of triumphal arch with a single opening, or carriage-way: when complete, the whole mass was as much in height as in extent—that is to say, very nearly a square. The attic, above the order which holds the inscription, is a little more than a fourth of the whole mass. The remainder is divided into two equal parts, the line of division determining the top of the impost on which the archivolt rests. The opening below is set out a perfect square, consequently the whole void, from its being terminated semicircularly, is a square and a half in height. The pedestals are equal to half the opening of the archway, and are a third of the order which rests upon them.

The arch of Constantine is an example of three openings, the whole length being divided into six parts; the height of the mass is made equal to five. The centre opening or carriage-way is a little more in width than a fourth of the whole extent, and its height to the top of the impost is a square and a quarter. The two lateral ways are a trifle more than half the width of the principal, but have a more lofty proportion. The order is equal in height to half the whole, and is placed on pedestals, which are a third of the column and its entablature. On the arch of Septimius Severus, they are made equal to half the height of the column.

GIOVANNI DA PONTE, A VENETIAN,

(Born 1512, died 1597,)

RESTORED the public edifices of the Rialto, and other dependencies of the Magistracy del Sale. He rebuilt the college and the anti-college in the ducal palace which had been burnt, adorning the soffit of the hall with inventions of his own. A short time afterwards, the hall of the great council and that of the Squittinio being burnt, and the palace greatly injured, Da Ponte rebuilt the whole with great ability, notwithstanding the opinion of Palladio, who desired a new palace, thinking that any repairs would be useless ; but the restoration was so well conceived and executed, that the edifice still remains beautiful and strong. Da Ponte was well acquainted with the difficult art of restoring. The roof of this edifice was covered with copper, it being apparent that the lead with which it was covered at first had assisted the conflagration ; but the copper was afterwards found to be inconvenient from its exciting great heat, and the lead was replaced. The best covering for roofs is plates of iron tinned.

Da Ponte built the store-house of the arsenal, that is a room 910 feet long, where the cables were made, with two ranges of thick brick columns, but of no order. His architecture in the church of the monks of Santa Croce, on the great canal, has no other value but its solidity. Of the same character, also, is the gate which he made to the church degl' Incurabili.

The triumph of this architect was the bridge of the Rialto, in which he had the advantage both of Palladio and Scamozzi, who had made most magnificent designs for it. His was chosen as being the least expensive—a great

merit, when not disjoined from beauty, convenience, and solidity. The mechanical part of this plan was most ingenious; and yet the work remained for some time suspended, in consequence of a rumour that it was too weak. It was examined, and discovered to be perfectly sound, and continued with increased precaution; and on the third year it was finished, without having settled or even moved a stone. Whatever is curious in the mechanics adopted in the construction of this bridge, may be seen in the "*Vite degli Architetti e Scultori Veneziani del Secolo XVI.*," by the learned and noted architect Tommaso Temanza, who, in giving useful information to artists, was also desirous of satisfying those who seek after what is useless.

The span of this arch is 66 feet: the thickness 4 feet: the usual height of the water 21 feet: the width 66 feet,—equal to the span of the arch. This width is divided into five parts, that is to say, into three streets, and two rows of shops between these streets. The middle one is 20 feet wide; the lateral ones, towards the canal, each ten wide; and each row of shops 13 feet wide. These are 24 in number, six on each side the ascent, and the same number on the descent. In the centre are two arches, which unite the shops, with Doric pilasters and pediments. On the sides of the bridge runs an entablature with a balustrade, forming a parapet, and other balustrades run on the descent. A variety of sculptures are placed on the foot and key of the bridge. The whole of the structure is of Istrian stone. The last work of Da Ponte was the building the prisons which were removed from under the ducal palace. The edifice is a quadrangle, with a portico of seven arches in front, on the entablature of which rises another story with seven large windows, ornamented with cornices, pediments, balustrades, and Doric columns. A rich entablature, with corbels in the frieze, finishes this façade, which has not the least appearance of a prison. The side towards the river is a rough rustic, called by

Temanza “graceful, and rendering the work majestic ;” but he knew not what constituted either grace or majesty. In the interior is an ample court, with a well in the centre : there are a number of stories with corridors and rooms of every description, which have all dwarf doors.

A bold arch unites the prisons to the palace, and this arch is called “The Bridge of Sighs.” The whole edifice consists of large masses of Istrian stone ; and is, perhaps, unparalleled of its kind for strength and magnificence. It was finished by Contino, a nephew of Da Ponte, who lived till the age of 88, in such a state of penury, as to be unable to support his family ; and the munificence of the senate alone relieved him in some measure from his embarrassments. A great reputation is sometimes attended with a small fortune ; but the contrary is more frequent, and fortune is fugitive without merit to retain it.

GIROLAMA CAMPAGNA, A VERONESE,

(Died 1552,)

AN architect and sculptor, and disciple of Cataneo, whose successor he was in many works of sculpture, particularly in the Santo at Padova. At Venice, he built and sculptured the isolated altar in San Giovanni and San Paolo, in the form of a square temple, with a cupola. The giant in the portico of the Zecca is by him. A number of his other excellent sculptures are spread throughout Venice and Verona. He also designed the monument of the friar Paolo Sarpi, who, according to Robertson, was the only philosopher among so many millions of friars, but it was not finished. The whole of Campagna’s architecture consists in sepulchres and altars, and neither the one nor the other requires an architect.

PIETRO CART

Was distinguished in architecture, and, in 1597, built on the river Penitz the famous bridge of stone at Nuremberg, his native place. It consists of one arch, 97 feet long, 50 wide, and only 13 high.

ALESSANDRO VITTORIA

(Born 1525, died 1608,)

Was born at Trento, of an honest family, and was sent by his father Vigilio, at a tender age, to Venice, to study drawing, to which he was much attached. In the school of Sansovino he acquired the rules of sculpture and architecture, and from the praises he received, imagining himself perfect in his studies, he ceased to be a pupil, and went to practice at Vicenza. Pietro Aretino, however, reconciled him to his master; he then returned to his studies, and finished the church of San Giuliano, the great chapel of San Fantino, and other works of Sansovino.

He designed the chapel and altar of the Rosario, in San Giovanni and San Paolo, with the marble sculpture and stucco; the monuments of Priuli in San Salvatore; and the oratory of San Girolamo, with superb statues in bronze and marbles. The principal façade of this edifice, which is entirely of Istrian stone, consists of two stories. The first has four coupled Ionic half columns on a basement; the second as many Corinthian columns, with an attic. The door is good, the windows bad, and the

altars still worse. The principal part of the façade of the school of Corpus Domini is in the same style.

To Vittoria is attributed the magnificent and incorrect Balbi palace, near the grand canal. It is said, that during the building of it Niccola Balbi lived in a boat, where he died. The great merit of Vittoria was not in architecture, but in statuary and modelling, in which he was inimitable arriving at an excellence that yielded to Buonarotti alone. Of this, his various works in Venice, both public and private, bear ample testimony; especially the statues and ornaments on the staircase of the library of San Marco, in the ducal palace, in the halls of the great council, and the Squittinio in San Rocco, in San Sebastiano, and San Francesco della Vigna. But a number of other cities of the Venetian states are decorated with the sculptures of Vittoria. Padua boasts the monument of general Contarini, in the church del Santo; Trevigi, a statue of San Giambatista, in the church of San Francesco; Verona, Brescia, Trau in Dalmatia, and other cities, possess a variety of his estimable works. He made a great number of busts for various personages, and was also fond of casting medals of illustrious men for his own gratification. He was much attached to botany, and cultivated a very beautiful garden—a study by no means inconsistent with his profession. He lived eighty-three years, and was always young; but time, well managed, is much longer than those imagine who are only skilled in losing it.

PIETRO PAOLO OLIVIERI, A ROMAN,

(Born 1551, died 1599,)

MADE the design of the church of Sant' Andre della Valle in Rome, in the form of a Latin cross, of one great nave, with a recessed chapel and a semicircular choir. An untimely death did not allow him to finish it. He was buried at the Minerva.

GIOVANNI CACCINI, A FLORENTINE,

(Born 1562, died 1612.)

HE was a disciple of Dosio, and was equally clever in sculpture and architecture. At the expense of the Bali Pucci, he erected at the church of la Nunziata, of Florence, a loggia, with arches and Corinthian columns of Sirena stone. He made the rich and noble oratory of the Pucci family, and designed the choir and great altar of the church of Santo Spirito.

MARTINO LUNGHI, A LOMBARD.

HE was a native of Vigiu, in the Milanese territory, and his first profession was that of a stone-cutter; he then, by practice and study, became an architect.

Under Gregory XIII. he erected that part of the palace of Monte Cavallo at Rome, called "the Tower of the Winds." For the fathers of the Oratorio he built the Chiesa Nuova, on the usual plan of a Latin cross. It is extremely dark; the numberless chapels are still more so; and the same fault is attached to the two narrow corridors on each side the great nave. Il Lunghi also designed the façade, which was afterwards executed by Fausto Rughesi of Montepulciano, which is of two orders, with useless pediments, projections, squares, and recesses; it is, however, majestic. More beautiful and more correct is his façade of San Girolamo, of the Schiavoni, at Ripetta, which has also two orders. Those of the Convertite at the Corso, and of the Consolazione, are both in the same style, but have only the first order executed.

He erected the campanile of the Campidoglio, and repaired the church of Santa Maria in Trastevere, and the palace of the dukes of Altemps at Apollinare. Among the other works of Martino Lunghi, the palace of the Borghese is remarkable, not only for its extraordinary form, which it has derived from subsequent additions, and not from Lunghi, but for the good arrangement of the stories, and the spacious and well-moulded windows. Thus, between the stories there were not those large meagre mazzanine windows, which deform the façade. The court is sufficiently large, nobly porticoed with double columns, over the entablature of which rise the arches. The inferior portico is of the Doric order, and the columns of the superior loggia are Ionic; and in number altogether there are 100. There are two staircases; the greater is a little difficult of ascent, and the lesser flight is one of those so much esteemed called winding, with isolated columns, and only calculated to produce a giddiness in the head.

The 16th century produced the greatest number of architects, and before that period Italy could never boast of so many or such great names as Peruzzi, San Micheli,

Buonarotti, Giulio Romano, Sansovino, Serlio, Vignola, Palladio, and Vasari, who all lived in the same century, and were superior artists. Were we to place them according to their real merit, that is, according to the knowledge and exquisite taste possessed by each in architecture, it appears that the first place would belong to Palladio; on his right hand would be Vignola, Buonarotti, Sansovino, and Vasari; and on the other, Peruzzi, San Micheli, Giulio Romano, and Serlio. If some sovereign or Mæcenas, with which Italy then abounded, had called an assembly of these great men, for the purpose of uniting their talents in a treatise on architecture, what a rich store of knowledge would have been granted to posterity! It is true that they have each separately given excellent laws, both with their pen and their rule, by practice and theory; but had they been assembled together for the space of a year, imparting their ideas, disputing, discussing, constantly within the circle of truth and taste, they would have penetrated to the very centre of the art, unfolded its true principles, deduced its just consequences, and hence would have arisen a code of architecture which would have been an infallible model to after times. But the 16th century was not that to establish an academy, nor has Italy, from that period to the present, possessed any durable one of science and art founded and regulated with wisdom, although there have been abundance of a minor description. In Rome there is the Academy of Drawing of St. Luke, instituted most certainly for the advancement of the fine arts.

On the plan of the Royal Academies of London, Paris, Berlin, and St. Petersburg, Italy should have one of architecture, in which there should be frequent meetings; the academicians should impart their opinions, minutely examine their respective designs, and an able secretary collect the decisions, and deduce the results. Thus would Italy preserve, promote, and perfect those arts, which, from the time of Augustus, have been her greatest ornaments.

CHAPTER IV.

OF THE ARCHITECTS OF THE SEVENTEENTH
CENTURY.

THIS century did not produce to Italy so many great architects as the preceding; it was, however, brilliant in specimens of architecture, the principles of which had been carried into almost every country of Europe.

ONORIO LUNGHİ,

(Born 1569, died 1619,)

THE son of Martino Lunghi, pursued his studies under his father, and made great progress in them; but being of an extraordinary disposition, and little disposed to social intercourse, he calumniated all his contemporaries, and consequently rendered himself odious. At Rome, he built the great altar and the choir of San Paolo, without the walls; the court, the gallery, and the loggia, to the palace of Verospi, on the Corso; and the church of Santa Maria Liberatrice, at Campo Vaccino. These works do not do him great honour. Very little is due to him for the great altar in Sant' Anastasia, a church well constructed, and ornamented with fifteen ancient and extremely beautiful columns, eight of which are of a rare paonazzetto, two of red granite, and two of African marble: but they are all badly placed, and encrusted with stuccoes by one Gim-machi, gentleman to the cardinal Cugna, titular of the

church, who, fancying himself acquainted with architecture, committed this absurdity. The façade of this church is by Luigi Arrigucci, a Florentine ; and although of two orders, separated by an entablature, with pilasters, and some useless projections, it pleases in the general effect.

Onorio was more successful in his plan for the church of San Carlo, on the Corso ; its form is a Latin cross of three naves, magnificent and beautiful. He sent a number of designs to foreign countries, and executed some of them at Bologna, Ferrara, and in Tuscany. He went also to Naples, but his edifices there are not known. He also understood military architecture, as did his father, and was, moreover, a doctor of laws and one of the literati.

MARTINO LUNGHI,

(Died 1657,)

SON of Onorio. He went to Sicily, Naples, Venice, and Milan, where he erected a variety of edifices, which, if in the style of the façade of Sant' Antonio, of the Portuguese, which he built at Rome, and of San Vincenzo and Anastasio, at Fontana di Trevi, cannot be very excellent ; these being against every rule of architecture, and regulated by the most extraordinary caprice. At Rome, he restored the church of Sant' Adriano, erected the façade of the Madonna del Orto, which is tolerable, and the great altar of San Carlo, on the Corso, which is simple, of no order, and following the style of the church ; the pediment, stuck upon the entablature, is a useless deformity.

The best work of this architect is the staircase, made

by order of the cardinal Gaetani, at his palace on the Corso, and generally cited as the most perfect in Rome. The stairs are of a rectangular form, and of good proportions, and this is the extent of its excellence. As for the polished marble steps, they are the most admirable means for breaking the neck, especially in wet weather. The flight of twenty-nine steps is steep, and too long for its width. It is possible that these two defects may have arisen from the narrow and confined situation, although the palace is spacious enough. At the head and foot of each branch are two useless Ionic pilasters, the bases of which cut the steps. A still greater defect is the hall door not being placed immediately opposite the state apartment, and in its stead is an ill conceived niche. It is difficult to imagine how a work of so much celebrity should possess so many defects; and there are still many others. The principal landing is composed of niches and doors ill proportioned, and mouldings disposed without order; and the cornices of these niches and doors cut the pilasters most barbarously. The cardinal Ginetti was so delighted with this staircase, that he had one exactly similar in his palace at Veletri, the effect of which, it is said, was much better, the architect having selected a more convenient and light situation, and adorned it with balustrades and fine marbles.

Martino was learned in the laws and sciences; he published a book of very spirited poetry, but he was insolent and quarrelsome; which evil qualities occasioned him once to be sent to prison.

It is related that a paper was found in his pocket containing a list of his sins. The lawyers, who are always willing to benefit themselves by increasing the evil, seeing frequent mention made in this paper of his having spoken ill of the P.P., interpreted these two letters to mean the pope; and it cost Il Lunghi much trouble to prove that they signified Pietro Peparelli, an architect, and his adver-

sary, or the Padre Peparelli, a Dominican, to whom is attributed the Bonelli palace, now the imperial, in the piazza of Santi Apostoli,—a palace of good proportioned architecture. Many stories of his mischievous brutality are recounted, and his general character is too far depraved to admit the possibility of his being a good architect.

VINCENZO DOTTO,

A nobleman of Padova, and an architect and geographer of great merit. He designed, in 1607, the beautiful staircase in the Capitano palace, in his own country. It was ornamented with Ionic columns, supporting the roof and the small cupolas of the landings. Its construction is so much admired, that it is attributed to Palladio. He also made the design for the Monte di Pietà, contiguous to the above-named palace, the gate of which has four Doric columns, and over them the same number of Composite.

GIAMBATISTA DELLA SCALA,

Of the celebrated family della Scala, erected, in 1631, the triumphal arch at Padova in honour of Alvise Valaresso, who, while governor there, evinced the greatest wisdom in his arrangements during the time of the plague

ANDREA DELLA VALLE,

BUILT the Carthusian monastery, two miles from Padova, his native place. The building is so well put together, that it appears cast in a mould, and so beautiful, that it has been attributed to Palladio, whose unprinted works he published, and in which he has inserted five prints.

CARLO MADERNO,

(Born 1556, died 1629,)

WAS born at Bissone, in the Comasco, and went to Rome in consequence of the reputation acquired by his uncle, Domenico Fontana. His first profession was that of stuccoing, but from practising with his uncle, and studying his works, he became an architect. He, however, always maintained a great attachment to his original pursuit, his buildings being invariably loaded with stuccoes. He finished the church of San Giacomo degl' Incurabili, and made the façade of two orders of pilasters, the first Doric, with plain metopes very improperly placed; the second Corinthian, with separated pedestals, but at very small distances. The whole of the façade abounds in defects. To San Giovanni of the Florentines he erected the choir and cupola; the latter is too pointed, and tending to the Gothic. He also erected the façade of Santa Susanna, which is grand and rich in travertine and sculpture, but a group of absurdities. It will be sufficient to notice,

that the upper pediment has a balustrade on its inclined sides.

Notwithstanding, however, his evident incapacity as an architect, he was appointed to complete the building of St. Peter's; a fabric which had occupied the attention of the greatest professors since the period of the restoration of architecture. Nothing remained to be done in this august temple but to finish that part towards the entrance, and give it the same form as that at the upper end, where is the chair of St. Peter, and thus complete the Greek cross, which had been the judicious intention of Bramante, Peruzzi, and Michael Angelo. The three arms were already completed; and Maderno, desirous of making it larger, as if size and beauty were twin sisters, turned the Greek into a Latin cross, and thus caused innumerable errors. Every part was originally beautifully proportioned, both taken separately, and with relation to the whole, producing a delightful harmony. The form being changed, these proportions were no longer the same. The effect produced on the spectator who enters St. Peter's for the first time will be that of an ordinary church; it appearing much less than it really is. This, by incorrect judges, has been attributed to the beauty of the proportions; and even Montesquieu, in his "*Treatise on Taste*," subscribes to this ridiculous opinion. But the real effect of just proportions is to make an edifice appear larger than it is, as is the case in the Sforza chapel in Santa Maria Maggiore, that of the Medici in San Lorenzo at Florence, the library in the same church, the temple of the Madonna degli Angeli, near Assisi, reduced by Michael Angelo to the proportions in which we now see it. When we enter these or similar edifices, our heart expands, becomes ennobled, and more capable of receiving the grand impressions which the building is calculated to inspire. Were we to enter St. Peter's with our eyes closed, not allow our attention to be excited

till we arrived at one of the two lateral arms, in which is the altar of St. Simon and St. Jude, or that of San Processo and Martiniano, we should be astonished at the grandeur, magnificence, and vastness around us, which are not evident on entering the principal gate ; and a sentiment of displeasure would imperceptibly be excited towards the presumptuous Maderno.

It is easy to perceive whence this grand defect arises, when we consider the disproportion between the two lateral ailes added by Maderno, and the grand centre nave planned by Buonarotti. The former are not wider than one of the many altars which are in them. Had not Maderno elevated them by means of the small elliptical cupolas, the disproportion would have been still more striking. But even these are not exempt from error, being placed on four arches, two of which are wider than the others : they appear inadequate to support the lofty cupolas, and are loaded with the same quantity of ornaments as adorn the larger arches ; it would have been better to have closed the ailes up, and appropriated each space to the uses of an altar, these ailes being, from their narrowness, rather passages or corridors to the various chapels ; and, from their want of width, injurious to the effect of the building. Again, in the great nave the two first arches are larger than those nearer the door ; in fact, such numberless and important errors lead us almost to imagine that he studied to do his worst. Perplexed with the ruins of the ancient church, he appears to have lost whatever knowledge he might have possessed, even that of drawing a straight line, not having made his additions run in the same direction as the former part, but inclining more towards the south : thus, when under the middle of the cupola, and looking through the bronze gate, the obelisk in the square appears many feet towards the north.

From the Greek cross being changed into a Latin one,

the superb cupola, which should rise perpendicularly from the façade, has not sufficient height to shew itself entirely. Its most beautiful part, the drum, is invisible at the proper point of view, though magnificent when seen at a great distance from Rome. The two elegant lateral cupolas placed by Buonarotti that the larger one might not be unattended, are scarcely seen a mile off. Added to this, the attic which surrounds the whole edifice is faulty in the extreme. It appears certain that this attic was not designed by Michael Angelo; because in a number of ancient pictures in the Vatican library, and elsewhere, the order in question is invariably wanting. Besides its enormous height, the windows are badly built, and the members heavy, the niches small, and without relief, and ornamented with torches and candelabræ of most absurd forms.

Maderno was, however, without doubt the author of the portico and façade of St. Peter's; and here he erred in the most essential quality of architecture, solidity. Having to combat with a light soil, like that of the ancient circus of Nero, the foundations of which were not coarsely built up, as in Maderno's work, the portico was scarcely finished, when it menaced ruin on the south side, where the ground is the softest: this obliged him to strengthen the foundations, but he did not do it effectually, although aware that at the extremity of his façade there were to be two campaniles. With regard to the architectural beauty of this portico and façade, its errors, abuses, and deformities, are so numerous, that a detail of them would exceed our limits. The badly-disposed doors are double in height to their width, and, although of the Composite order, have Ionic bases. The vaulting of the cupola is covered with a confusion of stuccoes. The columns of the façade are of various sizes and orders; and the pediment, instead of crowning the whole, is placed about the centre, and cuts the windows of the attic, the ornaments of which are in

the very worst taste : the work is terminated by a balustrade, supporting gigantic statues, which appear to crush their feeble pedestals. If the Signor Maderno was in his perfect reason while doing these things, it must be acknowledged that his reason differed from that of most professors. He may certainly be considered as a perfect master in the science of distorted architecture.

Maderno, however, acquired so much fame by his work at St. Peter's, that scarcely a building was completed without having his designs and advice. He finished the palace of Monte Cavallo, in which, besides a number of apartments, he built the chapel and hall. He removed a column from the ancient temple of Peace, and erected it in the square of Santa Maria Maggiore. He was commanded by the pope to examine the different ports of the state, and to take the plan of the fortress of Ferrara : during which journey he made a number of designs for buildings. Returning to Rome, he built the church della Vittoria — a miserable production, with narrow dark chapels, and overloaded with ornaments. The façade, however, was the work of others. He also erected the church and monastery of Santa Lucia in Selce, and that of Santa Chiara. He built a chapel at the Minerva for the Aldobrandini family, and the choir and cupola of Sant' Andrea della Valle, which, from its simplicity, is tolerably free from error.

He finished the Borghese palace on the Ripetta side, remodernised the Strozzi palace, and part of the Lancellotti. He also built the tribune of Peace, and projected the removal of the obelisk of Campo Marzo to the Monte Cavallo, or to Fontana di Trevi : but this obelisk still remains in its original position. One work really does honour to Maderno, the Mattei palace ; it is majestic, well disposed, and the doors and windows well set out.

Finally, he commenced the Barberini palace, to which he was accustomed to be carried in a litter, being unequal

to the fatigue of walking. This palace should have been placed parallel to the Strada Felice, the small houses opposite to it removed, and a larger piazza than the one called Piazza Barberini have been erected on the longest side of the building.

The fame of Maderno extended far beyond Rome, and many of his designs were sent to the first cities in Italy, and even to France and Spain.

FLAMINIO PONZIO, A LOMBARD,

BUILT for the Borghese family the Paolina chapel in Santa Maria Maggiore, similar to the Sistine, to which it is opposite, but richer in intaglios and sculpture, and consequently more confused. He also built the sacristy in the same basilica. He constructed the grand double staircase to the Quirinal palace, the flights of which are somewhat too long; and the second branches, which conduct, the one to the royal hall and chapel, and the other to the apartments, are narrowed in the centre by two pilasters supporting arches, the bases of which pilasters on the steps give a heavy effect. He began and rebuilt the basilica of San Sebastiano without the walls, and carried it up to the cornice. Ponzio's finest work is the façade of the Sciarra Colonna palace. The arrangement of the well-proportioned rooms, the justly-disposed windows, the requisite, though simple ornaments, produce at once an enchanting majesty and simplicity. Here we have an example of the grand correct style, stripped of all abuses. No superfluous cornices, no breaks and projections; one entablature alone crowns the whole: the grand door, so much admired by the vulgar, because

supposed by them to be of one piece, is, however, a blemish in the edifice. It is a highly ornamented Doric, and exceedingly discordant with the general simplicity of the building. The pedestals which support the fluted columns are too high for the size of the column, although agreeable to the proportions of Vignola; that is, a third of their height. They would have been better omitted altogether. This judicious architect died during the pontificate of Paul V., aged forty-five.

GIOVANNI FIAMINGO, CALLED VASANZIO,

FROM a worker in ebony, became an architect, and finished the church of Santo Sebastiano at Rome, giving a portico to the façade, supported by double columns — not a very happy production. He had some part in the palace of Mondragone at Frascati, and constructed for the cardinal Scipione Borghese the little palace in the Pinciana villa, of a good plan, but so loaded on the exterior with bas-reliefs and statues, that the eye is at a loss where to rest: the whole shews too evidently that Vasanzio had been an artificer of those rich ebony caskets and other bagatelles, which at one time were so much admired.

CONSTANTINO DE' SERVI, A FLORENTINE,

(Boan 1554, died 1622,)

BELONGED to one of the first families of Florence: a painter, engineer, and architect, he travelled throughout

Europe, and was received with the most signal honours at every court, where his society was always sought for. Finally, the grand sophy of Persia requested the duke Cosmo II. to send him into that country: he remained there nearly a year, but it is not known on what he was employed. At Florence he was appointed superintendant of all the commercial companies, of the works of the gallery, and of the superb chapel of San Lorenzo. He went to England, at the request of the prince of Wales, who appointed him in the same situation over a variety of buildings and machines, with an annual stipend of 800 crowns. He was then sent by the grand duke to Holland, in the service of the states-general, where he was much esteemed, and especially by the count Maurice of Nassau, who sent him back with highly commendatory letters to the grand duke. He made a design for a royal palace to be erected at the Hague; and then returned to his own country, from whence he was to have sent the wooden models; but we have not been informed whether the design was executed. Finally, after a number of journeys to every court in Europe, he died in Tuscany, in the service of the grand duke, in quality of vicar of Lusignano.

CARLO LAMBARDO,

(Born 1559, died 1620,)

OF a noble family, and native of Aretino, was both a civil and military architect; and, for the Vitelli family, rebuilt at Rome, on Monte Magnanapoli, the small palace which now belongs to the Pamfilj inheritance, and is opposite to San Domenico and Sisto. He built the façade of Santa

Francesca Romana at Campo Vaccino, with a portico of the Composite order in the interior, and of the Doric on the external sides. This Doric is interrupted in the centre by Corinthian pilasters, placed on very high pedestals. The idea is wanting in unity, but we cannot altogether condemn it.

For the cardinal Giustiniani, he designed a villa without the Porta del Popolo, graced with verdant walks, fountains, and statues, which are now in ruins ; the large gate is alone preserved : it is composed of Ionic columns, supporting nothing.

Lambardo wrote a small book, printed at Rome in 1601, on the cause of, and pointing out a remedy for, the inundations of the Tiber : it is poor both in philosophy and hydraulics.

JACQUES DE BROSSE,

A celebrated French architect, who flourished during the regency of Mary de Medicis. He designed the famous palace of the Luxembourg, in which is united extent, solidity, and beauty ; and is one of the finest palaces in Paris. It was begun in 1615, and finished in 1620. Its various elevations form a pleasing contrast ; but the Tuscan order, with rustic columns, on the ground story, is not consistent for a noble palace in a metropolis. The door is too light ; the upper Doric appears too short ; the rustic work renders it heavy ; the metopes are not exactly square, and in the frieze is a confusion of Christian attributes mixed with allegorical fables ; the staircase opposite the entrance, besides being heavy, wants light, and cuts the door of the garden, leaving too a narrow path from the great court. His design for the façade of St. Gervais is

much admired : it is of three orders ; the first, Doric columns, set a third into the wall, with unequal metopes, and a pediment over the door ; the second consists of isolated Ionic columns ; and the third of Corinthian, with an entablature and pediment above.

Besides these two esteemed edifices, De Brosse erected the aqueduct of Arcueil, which acquired him much honour. He published, in 1643, "*La Coupe des Pierres*" of Desargue ; and, in 1665, a treatise on Perspective. He was also a painter and sculptor. He constructed the great vaulted hall in the palace of Justice at Paris.

GIAMBATISTA ALEOTTI,

(Died 1630,)

WAS born at Argenta, a province of Ferrara, of a low family. He was a builder from his childhood, and practising with architects, became attached to their science : he studied it, devoted himself to geometry, and became not only clever in designing buildings, but also in levelling land, and draining marshes, lakes, and rivers. He erected the citadel placed by Clement VIII. at Ferrara ; and various theatres and other public buildings at Mantua, Modena, Parma, and Venice. He also made great progress in the belles-lettres, and wrote on the waters of the Polesine, of San Giorgio, and on the hydrostatic controversies of the three provinces of Ferrara, Bologna, and Romagna ; controversies which appear ever likely to remain such. He also published, "*Considerazioni d'Architettura di Geometria, e d'Idrologia.*"

LUIGI CIGOLI,

(Born 1559, died 1613.)

HIS real surname was *Cardi*, but on account of his being born at *Cigoli*, a territory of Tuscany, he took the name of his country. He was a good painter, anatomist, and poet; an excellent performer on the lute, and an architect. He was charged with the erection of the triumphal arches, and theatrical decorations, for the festivals held at Florence in honour of the marriage of Mary of Medicis with Henry IV. of France. He endured the observations inspired by envy with respect to these works, with the utmost patience and moderation. The bronze equestrian statue of Henry IV. on the Pont Neuf, at Paris, was designed by Cigoli. At Florence, he erected the Loggia of the *For-naquinci*, which has rustic Doric pilasters at the angles, with an ornament above, over which is a balustrade: in the centre is a large arch, flanked by two isolated columns; and on each side two lesser arches. He also built the court of the *Strozzi palace*,* with arches over each alternate intercolumniation, windows with triangular and cir-

* This palace is situated at the angle of the *Balestrieri* and *Albizzi* streets; it was constructed in 1602, after the designs of *Vicenzo Scamozzi*, who has given a plan of it in his works. Since his time it has undergone various changes; in the original plan of the court, now described, the vestibule was closed by a door; the present, executed by Cigoli, is not enclosed, and is united with the Doric portico that surrounds the court. The purity and beauty observable about all the details of Cigoli convey a high idea of his talents as an architect. The windows of the first floor, with attached Ionic columns, are remarkable for the beauty of their proportions; and the entablature which crowns the building is well suited to the rest of the design.

cular pediments, and others surrounded by an architrave. He made a design for the façade of Santa Maria del Fiore, of two orders, one Corinthian, the other Composite, with Doric doors ; it was preferred among a number of others. To the garden di' Gaddi in the Piazza Madonna, he made a door of the Tuscan order, esteemed very beautiful. He designed a piazza of an elliptical figure, before the Pitti palace, which, however, was not executed. His best work is the Renuccini palace, at Florence, of three stories, simple, and of good proportions. In Rome, Cigoli built the palace near piazza Madama, for the grand duke, now belonging to the Dataria. This palace is overcharged with useless ornaments, and has cariatides to the windows. The frieze under the entablature, enriched with sculptures, is too large, and cuts the windows of the Mezzanini story, which appear suspended in frames, and resemble those used to enclose so many pictures. The portico within the court is quite in unison with the wretched columns, over the capitals of which are as many arches. He executed a number of other works, and gave many designs for the façade and sides of the Basilica Vaticana ; but they did not please Paul V., who was too much infatuated with his Maderno.

Cigoli was most highly esteemed and respected by all who knew him ; but there were not wanting those who took advantage of his great modesty. A prelate, for whom he made an extremely beautiful picture, worth forty pistoles, after overwhelming him with compliments, placed in his hand a paper containing forty ginlj. When Cigoli opened it in presence of his pupils, he could not help uttering a complaint, but he never evinced any resentment. When on his death-bed, the pope sent him a brevetto of cavalier Servente, of Malta. He was a member of the infant academy of la Crusca : he composed a learned book on the nature and quality of colours, and the method

of preserving them; but it was stolen from him, and consequently lost. He also published a treatise on Practical Perspective.

CORNELIS DANKERS DE RY,
OF AMSTERDAM,

(Born 1561, died 1634,)

SON and disciple of Cornelis Dankers, who served his country in the quality of an architect. They held the same offices for the space of forty years, and during that time enlarged the city of Amsterdam, embellishing it with a number of respectable and convenient edifices, among which are the three new churches, and the gate of Haërlem, the most beautiful in the city, entirely of hard stone, ornamented with two thick columns, on which are lions' heads, and in the centre a small tower with a clock. The exchange for the merchants was began in 1608, and finished in 1613. It is 250 feet long, and 140 wide. The whole edifice is supported by three large arches, under which run canals. On the basement is a portico, which surrounds a court, over which are halls, supported by 46 pilasters. The divisions, formed by them, are numbered, and assigned each to a particular nation, or set of merchants. In this court, and within the enclosure, they meet to arrange their mercantile affairs. At the top is another larger hall, and a warehouse for various merchandises. He invented the method of building stone bridges without interrupting the course of the water, and tried it over the river Amstel, which is 200 feet wide, with perfect success.

GIOVANNI BRANCA, OF PESARO,

(Born 1571,)

THE architect of the Santa Casa at Loretto, an engineer and citizen of Rome. He built some good edifices; but the work which rendered him most known was the “*Manuale di Architettura*,” corrected and enlarged, in 1772, by Leonardo de Vegni, of Sienna, an architect of ability and taste. This small work is one of the most useful.

PAOLO GUIDOTTI, OF LUCCA,

(Born 1569, died 1629,)

WENT at an early period to Rome, where he applied himself to drawing, and became an excellent painter. He practised a great deal, and in almost all the edifices erected by Sixtus V.: the greater number of his works have been, by various accidents, either covered, spoiled, or demolished. He then studied sculpture; and in consequence of his executing a marble group of six figures, for the cardinal Scipione Borghese, pope Paul V. declared him Cavalier di Cristo, and allowed him to adopt the surname of Borghese, and made him conservator of the Campidoglio, which is the first magistrate of the Roman people. Guidotti filled his situation with the greatest credit; and at his desire a decree was issued, in pursuance

of which an inquiry was instituted into the conduct of all those painters who did not observe the constitutions and rules of the academy; and the fiscal of the senate was ordered to punish them according to their neglect of these rules. Such a decree must have affected all the professors of every art and science, and of every trade; and certainly there must have been some difficulty in enforcing its observance.

Guidotti was also considered a good architect. He was commissioned to make the magnificent preparations in the Vatican, in 1622, for the canonisation of the four saints, Isidoro Ignazio, Francesco Saverio, Filippo Neri, and Teresa. We are not acquainted with any other of his architectural works. Led on by an insatiable desire of knowledge, he studied mathematics, astrology, jurisprudence, and every species of music and poetry. He attempted an epic poem, entitled *Gerusalemme Distrutta*, obliging himself to conclude every eighth line with the same words as those of the *Gerusalemme Liberata*, by Tasso. It is difficult to say whether this idea was much to be applauded. His anatomical curiosity was certainly more useful; but this he also carried to an excess. He was accustomed to go by night to the cemeteries, and dig up the newly buried bodies, and remove them to some distant place, in order to study whatever might be necessary for his drawing.

But his most extraordinary whim was that of flying. He contrived wings of whalebone in the most ingenious manner, which he covered with down, and giving them sufficient folds by means of springs, joined them under his arms; and having made a number of trials in private, determined at length to make a public exhibition. He ascended from one of the eminencies of Lucca, and was carried for about a quarter of a mile; but his wings not being able to support him any longer, he fell through a roof into a chamber, and broke his thigh. Giambatista Dante, of Perugia, had also the same whim, and the same fate.

Oliver of Malmesbury, an English Benedictine, and good mechanic, in 1060, Bacville, a Jesuit of Padua, a Teatino of Paris, and a number of others, have all been thus desirous of soaring into the regions of air, and have all been equally successful. This, however, cannot be properly termed flying, but only an easier and slower method of falling. A flight can only be applied to the feat of the Padre Andrea Grimaldi of Civitavecchia, who returned from the East Indies with a wonderful machine of his own invention, in the form of an eagle; seated across which he was borne from Calais to London, 1751, making seven leagues an hour, directing his flight either higher or lower, as he pleased. This fact is most seriously recorded in the "Modern History." It is possible that posterity may consider this invention much to our honour.

If Guidotti had not attached himself to so many things, he might have been a good artist. His countenance was fine, and his general manner animated; he was, it may be supposed, singular in his thoughts and reasoning.

DOMINICO ZAMPIERI, A BOLOGNESE, CALLED IL DOMINICHINO,

(Born 1581, died 1641,)

A painter of the first class, and so clever an architect, that Gregory XV. gave him the care of the apostolic palaces and buildings. He made two designs for the church of San Ignazio. The father Grassi, a Jesuit, famous for his controversy with the great Galileo, made a mixture of these two designs, and from them produced that which was executed; but this not pleasing Dominichino, he

refused to make the design for the façade, and the building was transferred to Algardi. Passeri, however, makes not the least mention of this architectural work of Dominichino. It is asserted, that had his original design been carried into effect, Rome would have boasted of a temple which would have astonished succeeding generations. The plan of this temple is excellent, and the general effect of the principal arches admirable; but the projections of the impost, the heavy and overhanging corbels, which extend beyond the principal line, and the coupled columns, are evident defects. The bases are not ill-arranged; the centre is, as it should be, elevated; but when arches are large, it is better to use a plinth on an impost, which does not alter the effect. The rich soffit, divided so ingeniously in the church of Santa Maria, in Trastevere, is by Dominichino. He built a chapel in the same church, called Della Madonna di Strada Cupa. The great door of the Lancellotti palace is his design; it is flanked by two Ionic columns, united without any reason, and supporting a graceful balustrade. The columns are placed on circular plinths, for the greater convenience of admitting carriages: but the square figure of the door is at variance with the interior, which is arched. There are besides some badly-arranged ornaments over this gate, which cut the architecture.

The greater part of the elegant Belvedere villa at Frascati was designed by Dominichino; he also designed the villa Lodovisi at Rome, the gardens of which he laid out with a number of verdant walks, divided the grove with the greatest possible taste, adorned the whole with statues, and erected the small and truly picturesque palace. Passeri is also silent on this work. This able artist was always wrapped in meditation on his favourite art, painting. Thus, when walking in the streets, his thoughts were employed on the subjects on which he was at work, and in attentively examining those things which appeared

trivial to others. He never commenced a painting till the subject was perfectly pictured in his mind. The fathers Teatini complained that he had not been at work on their cupola of St. Andrea della Valle for some time: "I am always at work on it in my mind," replied he. When he had any passion to express, he was accustomed to excite it strongly in himself, and thus became his own model. He laughed, cried, became furious or tender, according to the subject he had to represent. Among his various talents, strength of expression was his distinct character. But his misfortunes were even greater than his transcendent abilities. In Naples, particularly, with regard to the chapel of the Treasury, he received the most painful mortifications; and died of grief, if not by treachery, as was the general opinion. He, however, left property to the amount of twenty thousand crowns, besides his movable effects; an evidence that his profession had not been so unsuccessful as some imagined. He was rough in his manner, and very suspicious, but extremely modest in his mode of living and his desire of praise. "*Lauda parce vitupera parcius*," was his device.*

GIOVANNI AICARDO, A PIEDMONTESE,

(Died 1625,)

WAS born at Cuneo, and went from thence to settle at Genoa, where he erected the public granaries, and carried the aqueduct of Calzolo a length of eighteen miles, over

* *Vite de' Pittori, Scultori ed Architetti, che anno lavorato in Roma di Giambattista Passeri.*

hills and vallies, and built the choir of San Dominico, and the Serra palace.

His son, Giacamo, widened two bridges in Genoa ; and, among other works, extended the wall of the dock to San Marco, fortifying it with a bastion.*

GIOVANNI COCCOPANI,

(Born 1582, died 1649,)

WAS born at Florence, of an illustrious family of Lombardy. He was learned in the laws, history, mechanics, and mathematics, and in civil and military architecture. He was clever in painting, and was preceptor to a number of the first families in Italy and the northern countries, with whom he preserved an epistolary correspondence. In 1622, he was sent for to Vienna, and was employed by the emperor, in the quality of engineer, in the wars, and was so successful, that he was rewarded with some fiefs. Returning to Florence, he built the palace of the villa Imperiale for the grand duke, and erected the convent for the monks of Santa Teresa del Gesu, with the church, of an hexagonal figure, and a well-proportioned cupola. The grand duke wished to establish a professorship of mathematics at Florence, and selected Coccopani as the professor, who well fulfilled the intention of the prince, and taught the youth not only geometry and arithmetic, but every other branch of the mathematics, perspective, fortification, architecture, &c.

* Vite de' Pittori, Scultori ed Architetti, Genovesi di Raffaello Soprani.

The father Castelli dying at Rome, Coccopani was invited to fill the chair, as professor of mathematics ; but he refused to leave Florence. He had a great genius for machinery, and after his death a model was found of a machine, in which, by means of thirty flasks of water, placed in a large cistern or coffer, corn might be perfectly ground, and, at the same time, engravings printed, with many other operations.

His brother, Sigismund, was also a learned man, a painter and architect, and much esteemed by Galileo. He, however, did little or nothing in the latter science, preferring theory to practice.

BENJAMIN JOHNSON,

(Born 1575, died 1637,)

WAS born at Westminster ; and his mother marrying a second time to a builder, obliged her son to learn the business of his step-father. He worked from indigence at the buildings in Lincoln's Inn, with a trowel in his hand, but a book in his pocket. His taste for poetry soon overcame the square, and he became a celebrated dramatic poet, even rivalling Shakspeare in tragedy ; and if inferior to him in genius, he certainly surpassed him in a knowledge of the ancients, which he asserted with great boldness. His epitaph is,

“ O RARE BEN JOHNSON ! ”

MATTEO NIGETTI, A FLORENTINE,

(Died 1649,)

A disciple of Buontalenti, was greatly concerned in the execution of the Strozzi palace at Florence. He built, in the same city, the cloister of the monks degli Angeli, the new church of San Michele degli Antenori, belonging to the Teatini fathers, which was finished by Silvani; and made the design and model of the church of Ogni Santi, belonging to the brothers of Osservanza. The grand duke Cosmo I. had intended to erect a third sacristy in San Lorenzo, the same size as that of Michael Angelo, but entirely covered with marbles and mosaic, and to contain a sepulchre for the grand dukes. Vasari made the design, but Vasari and Cosmo I. both dying, the grand duke Ferdinand I. enlarged the idea, and communicating it to Don Giovanni de' Medici, who was not less valorous in war than accomplished in the fine arts, more particularly in drawing, requested him to make the design and model for it. Don Giovanni complied with his wish, and produced not a sacristy, but a stately structure, the beautiful cupola of which gives effect to the church of San Lorenzo. Nigetti executed the design: in 1614 he commenced this famous work; and made designs for all the valuable ornaments with which the walls were encrusted, under the direction of the last-mentioned prince.

Nigetti was also a sculptor, and practised the art of cutting gems and hard stones: his principal work was the wonderful pix, or shrine, in the chapel of San Lorenzo.

INIGO JONES,

(Born 1572, died 1652,)

WAS born in London, and received the name of Inigo on account of some Spanish merchants, with whom his father was connected in the wool trade, standing as his sponsors. By some it is insisted that his father gave him a very expensive education; by others, that he put him apprentice to a carpenter. Be that as it may, it is most certain that, from his earliest childhood, Inigo was attached to and studied both drawing and painting, and was so successful in his landscapes, that he attracted the attention of the earl of Arundel, or, according to some, Pembroke, who generously provided him with the means of travelling to the most learned countries of Europe, to perfect himself in that art. His first journey was to France, Flanders, Germany, and Italy, examining with attention the various tastes of the nations and times; and he acquired such great fame, that while at Venice, Christian IV., king of Denmark, declared him his architect. This monarch esteemed him greatly, and took him to England with him, where his attachment to his country made him anxious to remain. The king, James I., then nominated him his architect.

The first introduction of the Roman style may be attributed to the famous Hans Holbein, in the time of Henry VIII. Of the buildings erected by him in England, nothing remains but the portico of the earl of Pembroke, at Wilton. This edifice, although purer than the works of his successors, is a species of bastard style, between the Gothic and the Greek; but the ornaments and proportions are graceful and well chosen. Under

the same king, Giovanni of Padua was sent for, and appointed superintendant of the royal edifices. He built Holmby House, in a very beautiful style; Woollaton Hall,* in the county of Nottingham; and the portico of Charlcot House. The painter Girolamo, of Triviso, also built a number of edifices in England. Under Henry VIII., flourished likewise Richard Lea, but he adopted the Gothic style.

John Thyne, one of the first officers of England, built Somerset House, 1567, which was an unfortunate mixture of Greek and Gothic.

John Shute, a painter and architect, flourished under Elizabeth; he was sent to Italy by the Duke of Northumberland, to study under the best architects; and, in 1563, published a volume, in folio, on the fundamental principles adopted by the ancient architects in their most famous monuments.

Stickles was also an excellent architect of this time; and, in 1596, he constructed a galley which would take to pieces.

Robert Adams, who died 1595, was superintendant of the royal buildings, and a skilful architect. He gave a description of the Thames, and of the manner of fortifying it. Under Elizabeth, flourished likewise Theodorus Haveus, an architect, sculptor, and painter, who, in 1566, erected a college at Cambridge, at the expense of a Dr. Cajus. In this edifice some return of good architecture is visible. The columns are small, the pilasters well-proportioned, and neatly executed.

The architect Ralph Simons, built, among other things, Emmanuel and Sidney colleges, and embellished a great part of Trinity.

* In Vol. II. of Mr. Britton's Architectural Antiquities, will be found an account of some of these buildings, illustrated by plans, views, &c.: and from an inscription in Woollaton church, the architect of this hall is discovered to be Mr. Robert Smithson, gent., who died in 1614.

James I. took no interest at all in the fine arts, and it was well he did not; for he who considered quibbles and formalities as evidences of eloquence, would have introduced as bad a taste in architecture as he did in literature.

During his reign lived Bernard Jansen, a Fleming, a great imitator of Dietirling, a famous Flemish architect, who wrote a number of works on architecture. Jansen built Audley End in Essex, with a vast gallery, and immense rooms, which, however, are not proportionably high; and a great part of Northumberland House. The façade was by Gerard Christmas.*

John Smithson, who died in 1648, was in the service of the duke of Newcastle, who sent him to Italy, in order to collect the best designs. He had some part in the construction of Welbeck and Bolsover castles.

Stephen Harrison invented the triumphal arches erected in London on the accession of James I.

The time of Charles I. may be considered the dawn of good taste in England. Elizabeth was fond of pomp, but parsimonious. James I. prodigal, but an encourager of architecture. Charles I. patronised the arts, distinguished ability, enriched the country, and was generous, while he was economical. He had all the virtues to have made his country happy; and happy would it have been for him, had he not thought himself the only one capable of making it so. He was a perfect gentleman, managed his pencil well, learned, and of excessive discernment in the fine arts and the sciences.

Till the year 1625, almost all London was of wood; and the earl of Arundel was the first who introduced stone for private buildings. A little more than a century back,

* "Anecdotes of Painting in England, with some Account of the Principal Artists," by Horace Walpole; where mention is made of some of the foregoing and few following artists.

England was sunk in slavery and barbarism ; and, after an almost overwhelming tempest, she now shines forth a brilliant model to all Europe. Among the great men who have been celebrated, as superior in the most learned nations of Europe,—as, her Miltons, her Newtons, and her Lockes,—Jones has certainly claims on her gratitude, for having adorned her with specimens of true architecture. His first works have some remains of rudeness ; but returning a second time to Italy, in order to study with deeper attention the most conspicuous efforts of ancient and modern architects, he acquired so pure a taste, that from that time none has appeared superior to him : Palladio alone was his equal.

On his return to England, he was appointed surveyor-general ; and finding that the board of works had incurred a considerable debt under his predecessors, he would not accept of any salary until these debts were liquidated : his example induced the comptroller and paymaster to do the same ; and these debts were discharged without any extra weight being laid on the people. Such patriotism as this is one of those noble virtues which should excite not verbal and barren admiration, but imitation : there are, at this moment, many states in Europe that are in want of such an expedient. Under the tempestuous reign of Charles I., he suffered much from the parliament, who were equally violent against all attached to the king : Jones was persecuted, and at length obliged to pay a fine. The martyrdom of the king affected him greatly, and so injured his health, that when replaced in his office by Charles II., his debilitated frame would not allow him fully to satisfy the magnificent ideas of that voluptuous monarch. The principal works of this rare architect, are the following.*

* In 1620, Inigo Jones was appointed one of the commissioners for the repair of St. Paul's, but which was not commenced till 1633 : he added a magnificent Roman portico to the west front, which had no

At Whitehall, the sumptuous building called the banqueting-house, or great hall of audience. Over a rustic basement rises an Ionic order, then a Composite, with an attic and balustrade above. In this edifice, elegance is combined with strength, ornament with simplicity, and majesty with beauty. The soffite is painted by Rubens, the sides by Vandyke, with some additions by Jones. This superb building is only a small part of a royal palace which Jones designed, and which was worthy of being executed. The design for this palace consists of six courts; the centre one, 125 feet long and 85 feet wide; that towards the park is a square of 245 feet. Of the other four courts on the sides of the centre one, two are 125 feet wide and 250 feet long; the other two are in proportion. The entrance is in the style of a triumphal arch, and at the angles rise two elegantly constructed towers. The façade towards the Thames has two stories, Doric and Ionic; the opposite is Ionic and Corinthian. The windows are Palladian. Magnificence shines throughout the whole, both in the variety and excellence of the proportions, and the convenience and beauty of the apartments. In Greenwich park, 1639, as a retirement for the dowager queen, he built a palace on a square plan, with a hall of 40 feet cube. The façade has a rustic basement, which supports a regular loggia of architraved Ionic columns, and crowned with a balustrade, which continues round the whole edifice.

In Somerset gardens, a grand gallery with arches; but from the fault of those who executed the design, the entablature was clumsy, and the windows not sufficiently relieved. The palace of Gunnersbury, near Brentford, executed by his pupil Webb, contains, in two floors, some noble, regular, and commodious apartments, with pro-

affinity whatever to the Gothic cathedral. He committed the same error at Winchester, where he introduced a screen in the Grecian style, between the nave and choir, amidst the most beautiful pointed architecture.

portionate chambers. The façade has a continued basement, on the centre of which is a loggia of Corinthian columns, with rather wide intercolumniations, entablatures, and pediments.

The Lindsey-house in Lincoln's Inn Fields. From a rustic basement rises a regular Ionic, with an attic and balustrade, adorned with vases, which are continued throughout the whole of this harmonious building. The windows are well-proportioned, ornamented with grace, and without affectation.

Jones designed a royal palace at Greenwich for Charles II. Webb executed it; and William III. afterwards appropriated it to a naval hospital, making many additions. This hospital, which is on the banks of the Thames, a short distance from London, is not to be equalled in the whole world for magnificence, beauty, convenience, and extent. The apartments are noble, with a variety of conveniences, the most delightful views, and a number of pictures by Thornhill, the English Apelles. The attic, which is above the grand Corinthian order, appears too high, though only a third of the whole order. The rustics are correct, the ornaments elegant, the arrangements well made. It will be observed, — Why so much magnificence for an hospital, to be occupied by the poor and infirm, and which should consequently be simple, and fitted for the use to which it is destined? But certainly magnificence is consistent with an hospital for English sailors, who form the strength and glory of their nation.

The church of St. Paul's, Covent Garden.* This is of

* This chapel or church was erected by order and at the expense of Francis, the fourth earl of Bedford, and cost 4,500*l*. Ralph, in his critical review of the public buildings, observes, that "this church is without a rival, and one of the most perfect pieces of architecture that the art of man can produce: nothing can possibly be imagined more simple; and yet magnificence itself can hardly give greater pleasure. This is a strong proof of the force of harmony and proportion, and at the same time a demon-

the Tuscan order, situated in a porticoed square. It is considered one of the most unique specimens in Europe, and possesses the majestic simplicity of the ancients. The Exchange, or Royal Exchange, built at the expense of Gresham, and rebuilt after the fire of London, in 1666, is said to have been designed by Inigo Jones; but is certainly inferior to all his other works. It is 205 feet long, and 180 wide. In the centre is a pavilion of the Corinthian order, with a bold arch, flanked at the side by two smaller ones; from the centre of the edifice rises a superb tower of three orders, — Ionic, Corinthian, and Composite. The rustic arch is condemnable, as the key-stones are too small, and give the edifice a weak appearance. The whole of the upper part is adorned with balustrades and statues. This edifice cost more than 50,000*l.* sterling; it produces annually 4000*l.*, and may be considered the richest possession in the world, in proportion to its size.

York gate and steps on the Thames, made for the duke of Buckingham, when admiral of England. In this the Tuscan order prevails, with rustic columns. In the frieze over every column is a sea shell, at the extremities are two lions rampant, also supporting shells; and over the great gate a pediment, with armorial bearings in the centre, and a shell at the top: these shells are consistent in an edifice belonging to a naval officer.

The palace of lord Pembroke, at Wilton, in the county of Wilts, is a masterpiece. To the beauty of architecture is united richness in bas-reliefs, statues, and marbles from Tuscany, and paintings from the celebrated Vandyke.

Amesbury House, for lord Carleton, in the county of
stration that it is taste, and not expense, which is the parent of beauty." The church is 133 feet in length, and 60 feet in front, and in height to the apex of the pediment a little less. These dimensions are outside, and include the thickness of the walls.

Wilts, was executed by Webb. Over a beautiful basement is an architraved loggia, with Composite columns. It is remarkable that the newell of the grand staircase contains another smaller one.

Various are the works of this great architect,* who followed the taste of the ancients, and in some points surpassed them. It was he who first introduced design into England, till then unknown, and established a taste for architecture, following the track of Palladio, on whom he has made some curious observations and notes, which are published in the works of Palladio, translated into English by Giacomo Leoni, architect to the elector palatine, and published in 1742. Jones also invented ingenious decorations, and wonderful machines for shows and diversions, the delight of Charles II. The reputation of this architect, therefore, is really great in all respects.

Jones wrote a dissertation upon Stonehenge, published after his death by his excellent pupil and relation Webb.

* To this list may be added, Barbers' Hall, in Monkwell Street, London; the building which fronted the gardens of old Somerset House; the plan of Lincoln's Inn Fields; the inner quadrangle of St. John's College, Oxford; the Queen's chapel, St. James's; Shaftesbury House, on the east side of Aldersgate Street; the garden front of Waller House; the Grange in Hampshire; Cashiobury in Hertfordshire; Lord Radnor's, at Coleshill, Berkshire; part of Cobham Hall, Kent; fronts of Holyrood House and Heriot's Hospital, Edinburgh; Stoke Park, in Northamptonshire; the south and east side of Castle Ashby; inside of the church of St. Catherine Cree, Leadenhall Street. At Wing, in Buckinghamshire, was a house built by him; the front to a garden of Hinton St. George, Somersetshire, the seat of Earl Paulet; the front of Brympton, formerly the residence of Sir Philip Sydenham; part of Chilham Castle, and tower of the church, at Staines. He made some alterations and additions at Sion House; at Oatlands, a gate of the old palace; the gate of Beaufort Garden, Chelsea, now removed to Chiswick. He drew a plan for a palace at Newmarket, which was not executed; a handsome gate at Clifton Maubank, in Dorsetshire; the front of Lee Court, Judde House, and Chevening, in Kent; Storyhurst, near Malham Craven. A palace, and front of a church, at Leghorn, are said also to be by him.

In Germany, France, Spain, and Flanders, are found heaps of stones, the arrangement of which is attributed by some to the Romans, by others to the Aborigines of the respective nations, to the Celts, Gauls, Britons, and Germans. It is universally believed that these assemblages of stones are ancient monuments of battles, victories, and the sepulchres of illustrious men and princes. In England they abound more than in any other country. On Salisbury plain there are reckoned 128; and towards the summit of a hill is one of extraordinary size, called Stonehenge. Its figure is elliptical; Jones makes it similar to the Pantheon at Rome; its exterior circumference is greater than the cupola of St. Paul's, London; it is surrounded by a regular fosse, and the interior circumference is 100 feet. It has a cornice 18 feet high on the exterior, and 24 in the interior. The stones are of such an enormous size, that 150 oxen could scarcely draw one; the vulgar have supposed them the work of magicians or giants, and some have thought them to be a composition. Amidst these assemblages of stones are found bones, urns, spades, pieces of amber, crystal, and other materials for collars, bracelets, &c.; hence they have generally been considered burying places. Jones alone maintains, in this posthumous work, that Stonehenge was a temple; but to support this idea we must alter some of the dimensions, and remove some of the large stones, in order to make them correspond with his plan, or that of Webb.*

* Inigo Jones died at Somerset House, 21st of July, 1651, and was interred in the church of St. Bennet, Paul's Wharf; but his monument was destroyed during the great fire of London. The celebrated Vandyke has remarked, that in designing with his pen he was not equalled by any great master of his time, for the boldness and evenness of his touches. The library of Worcester College, Oxford, possesses a copy of Palladio's architecture, with MSS. notes by Inigo Jones, which were inserted in the edition of Palladio that appeared in 1714. Lord Burlington had a Vitruvius noted by him in the same manner.

BALDASSARRE GERBIER D'OUVILLY

(Born 1591, died 1662,)

WENT from Anvers, his native place, to England, when a youth, where he acquired the patronage of the renowned favourite the duke of Buckingham, and rendered himself illustrious in architecture, painting, and negociations. Charles I. made him a knight in 1628, and promised him the superintendence of the royal edifices after the death of Jones. He published a volume, 4to., called, "The Interpreter of the Academy for Foreign Languages, and for all the Sciences and Noble Exercises;" a most miserable rhapsody. He afterwards settled with his family at Surinam, whence he was driven with so much violence by the Dutch, that one of his sons was murdered. Returning to England with Charles II., he designed the triumphal arches for the reception of that prince after his many calamities. He published a work in France on fortifications, and, in 1662, a small discourse in London on the magnificent buildings, in which he treated principally on solidity, convenience, and ornament. He satirised Jones on the errors in the banqueting-house, mentions a room built at the gate of the famous York steps, which is a square of 36 feet, and says that Charles I., going there to a scenic representation, commended it as equal with the banqueting-house.

He proposed to the parliament to level the streets of London, and to erect a sumptuous gate at Temple Bar, a design for which he presented to the king. His last work was a book entitled, "Advice to all Builders:" in this he ridiculed the lion's heads between the pilasters of the houses in Great Queen-street, built by Webb. The palace

at Hemmell Hempstead, afterwards destroyed by fire, was also his design.

Gerbier instituted an academy in London, on the model of that of Charles I., called *Museum Minervæ*. None but those who could prove themselves gentlemen, were to be educated in this academy, in which were taught the arts, sciences, languages, painting, architecture, fortification, antiquities, &c. But this noble institution was destroyed, with the plans made by Charles I., for the sole reason that they were made by him.

GIACOMO DE BREUCK, A FLEMING.

It is not known whether his birth-place was Mons or St. Omer, both these cities having claimed him as a native. He understood architecture extremely well, and had a genius capable of the greatest undertakings. Throughout the whole of his edifices there was great nobleness of thought, and the distribution of the detail was useful and agreeable, attention being paid to the most perfect decoration, without forgetting solidity. In 1621 he erected some considerable edifices at St. Omer; and at Mons, in 1634, the superb building for the monks of St. Julian. For his own amusement he also practised sculpture.

GIAMBATISTA SORIA, A ROMAN,

(Born 1581, died 1651,)

BUILT at Rome the façade of the church della Vittoria, very similar to that of Santa Susanna, which is equally

defective. In the same style is the façade which he erected at San Carlo de' Catenari. The principal value of these works consists in their size, and in the richness of the travertines and sculptures. The church of San Carlo de' Catenari, a Greek cross of one nave, with a cupola, and having the arm of the great altar larger than the other three, was built by Rosata Rosati, a sculptor and architect of Macerata, who built the church of the Jesuits in his own country at his private expense.

By desire of the cardinal Scipione Borghese, and patron of Soria, he built the porticoes and façade of San Gregorio. The porticoes are mediocre, and the façade, although of two orders, and with the usual errors, is elegant and chaste in its effect; an advantage which results from having a very large space in front, and, from being at the back of the Monte Celio, elevated on a wide though inconvenient flight of steps. And who could suppose that this façade, which represents that of a church, should be in reality other than what it does represent? On entering we find a porticoed court, at the end of which is the church. What a beautiful situation for a fine edifice is thus lost! It will be evident to any one, that at such an elevated situation, and with such a space in front, a most picturesque perspective might be produced, and have shewn at the same time both the portico and the façade of the church. Soria shewed also but little genius in the portico of San Grisogno, and in the church of Santa Caterina of Sienna, on the Monte Magnanapoli.

ALPHONSO PARIGI, A FLORENTINE,

(Died 1650.)

His father was Giulio Parigi, a number of whose edifices he finished at Florence, after his return from Germany,

where he had served the army in the quality of an engineer. It is astonishing with what ingenuity this architect restored a floor of the Pitti palace, which was out of the level, and inclined more than nine inches. He made a number of holes in the exterior wall, through which he passed large chains of iron, which he fastened externally by bolts : to the extremities of these chains he placed a number of screws within the apartments, and by the means of levers, together with these, he accomplished the work.

Parigi was also desirous of adding two wings to this palace, and commenced the left ; but after having erected the majestic walls, he abandoned the work, possibly because the wings standing on a declivity, there was much difficulty in making the doors and windows range : besides, these two wings must have appeared mean and low, when compared with the extreme loftiness of the palace, placed by Brunelleschi in the highest part of the square.

Alfonso Parigi also built the Scarlati palace at Florence, with three well-divided stories, but badly-arranged windows. He also repaired the banks of the Arno, which having burst, greatly damaged the adjacent country : but this work met with so much opposition from those who were envious of him, that it cost him his life.*

BARTOLOMMEO BIANCO, A LOMBARD,

(Died 1656,)

WENT from Comasco and established himself at Genoa where he superintended the construction of the new pier

* Alphonso Parigi also erected the first cloister attached to the church of Santo Spirito ; and after the death of Vasari he completed the palace of Uffizj.

and the new wall which encloses the city. Among his various works at Genoa, the most conspicuous are three grand palaces of the Balbi family, one of which was in possession of Durazzo, and the magnificent college of Jesuits, in the Strada Balbi.

GHERARDO SILVANI, A FLORENTINE,

(Born 1579, died 1675,)

WAS of a noble but decayed family. His native Florence is indebted to him for a great number of embellishments, both in sculpture and architecture. He restored the Albizzi palace, constructed the church and habitation of the Teatini, finished the casino of San Marco for the cardinal de' Medici, the church of the Compagnia delle Stimmate, and the façade of the Strozzi palace, towards Santa Trinita, which is of three stories, but badly proportioned. The first story has Doric pilasters at the angles and at the flank of the great door, with an entire entablature and ornaments in the frieze; the second story has the windows flanked by Ionic pilasters and balustrades; the third has windows of the Composite order, and large elliptical windows above, surrounded by rustic work. The Capponi palace in Via Larga would have been much more beautiful, if its proprietor had not, from motives of economy, prevented the architect from raising it higher. In Via San Gallo, for the Signor Castelli, he built that noble palace, one of the most beautiful in Tuscany, now belonging to the Marucelli; and in Via Guelfonda the magnificent Riccardi palace, which is a royal residence. He also made a noble design for the enlargement of the Pitti palace, with a large square in front, but, through means of his rivals,

it never was executed ; and Silvani, who was one of the most peaceable men in the world, gave himself no concern about it. The grand duke Ferdinand, who particularly esteemed this architect, commissioned him to strengthen the cathedral, for the façade of which he made a design of two orders, better adapted to the Gothic structure. Many architects have made designs for the façade of that church : Bontalenti, Dosio, Don Giovanni de' Medici, Passignano, Baccio del Bianco, who made so many wonderful machines in Spain, and the academicians of drawing at Florence ; in preference to all these, that of Silvani was chosen : and yet the edifice still remains without a façade ; the common case with all the churches at Florence. The palace and casino in Pinti for Salviati, the Bardi palace in Verbellezza, the villa della Falle for Guadagni, and at Pistoja, the Sapienza,—are all by Silvani. Much longer is the catalogue of this architect's works, who, during the space of ninety-six years, was always occupied. Among his designs were the façade of the Gianfigliuzzi palace, and the church of San Francesco di Paolo without the walls of Florence.

The bridge of Pisa having given way, Silvani made a design for a new one ; but that of Bartoletti was preferred, who thought, if made of a single arch, it would become the wonder of the world. This was finished in two years. After standing eight days it experienced a terrible shake, and in the morning the miracle was no more.

Silvani was a clever architect, and well acquainted with sculpture ; he was a good and great man, charitable and generous, and of a very retired disposition. He always lived in good circumstances, and was so industrious, that, within a few days of his death, he went to the cathedral, and ascended the long, narrow, and winding staircase of the campanile and cupola, in company with the builder, who was 100 years of age.

Pier Francesco Silvani, his son and pupil, was a good architect: he was much employed in the cathedral at Florence; and, among his different buildings, the church of the Padre dell' Oratorio is very creditable, for which Pietro da Cortona made a design previously, but in consequence of the expense it was not executed.

PIETRO BERRETTINI,
CALLED PIETRO DA CORTONA,

(Born 1596, died 1669.)

THE merit of this excellent painter is well known to the whole world. The marquess Sacchetti seeing him at Rome in the shop of a gilder, painting some small figures on seats, was surprised at the ability of the lad, took him to his own house, and enabled him to pursue his studies; he thence became a painter of the highest class, and an architect. He made a design for a palace, which the marquess Sacchetti built at Ostia. The design which he made for the palace of the Louvre, in concurrence with Bernini and Rainaldi, was highly approved; and Louis XIV. sent him his picture richly set in jewels. At Rome he made designs for the monument of the count Montauti, at San Girolamo della Carita; and for that of the family de Amicis, at the Minerva. In San Lorenzo and Damaso he built the chapel of the Conception. He restored the church della Pace, both externally and internally, adorning the façade with a graceful portico. This portico was so much to the satisfaction of Alexander VII., by whose order it was erected, that he declared Pietro da Cortona a cavalier, and rewarded him munificently. It is semicircular, with Doric

columns, architraved and coupled. The taste of the ornaments in the roof is noble ; but the circular pediment, which is over the door, is useless and unsightly, as are also the projections made by the pilasters at the sides of the door. The upper part of the façade is surrounded by pilasters and columns, with broken cornices, ungraceful windows, and two pediments, one within the other. In the interior of this church the octangular plan is beautiful, and as is also the cupola, which rises out of a similar figure ; and the vault, adorned with hexagonal compartments, is elegant. But the pilasters, inclining to the obtuse angles, are not agreeable, and the cornices of the two larger arches, cutting the pilasters at their sides, are insufferable.

In the church of San Carlo, at the Corso, Pietro built the transept, the tribune, and the cupola, which is simple, of a good figure, and has buttresses a little distant from each other : they have a trifling projection, and are not very apparent. This beautiful cupola rises from a Latin cross.

The façade which this great man erected at Santa Maria, in Via Lata, is universally admired. It consists of two stories ; one the Corinthian order, the other Composite. In the centre is a small portico of isolated and architraved columns, not well disposed ; the centre intercolumniation is sufficiently wide for an entrance, but the lateral ones are narrow and unequal ; then follows a group of pilasters, which conceal each other ; and at the angles, where greater strength is required, there is but one pilaster. Thus the exterior being rather mediocre, the number of Corinthian capitals create confusion, especially when seen a little in profile. The upper story is in the same style ; the only difference is, that the centre has an arch, which very unnecessarily interrupts the ornament above, and the frieze and cornice following round the curve. It was strange thus to make an arch above the floor, which is represented by the entablature. It is to be observed, also,

that the vaults of these two porticoes press against the façade, and that, therefore, iron chains should have been used. The termination is a pediment, which, for what reason we know not, does not extend over the whole.

The ancient church of Santa Maria Martina, near the arch of Septimius Severus, having, in 1588, been granted by Sixtus V. to the society of painters, sculptors, and architects, who, under Urban VIII., dedicated it to St. Luke, their protector, the Barberini princes rebuilt the church at their expense, and appointed Pietro da Cortona their architect. He was so much attached to this church, that he was accustomed to call it his delightful daughter. At his own expense he built the whole of the crypt, and finally left his fortune to the treasury, amounting to about 200,000 crowns. It would very naturally be supposed that the temple of the academicians of drawing at Rome, in the very Forum, surrounded by such numberless ancient monuments, at the foot of the Campidoglio, and built by Pietro da Cortona, would have been a perfect model; this edifice, however, has few beauties, and many defects.

The plan of the church, a Greek cross, is certainly elegant, terminating in a curved line at each of its four arms; the proportions are good, and in the centre is a beautiful cupola. The whole of the rest of the interior is bad; a mixture of columns and pilasters on a very high arched basement, the entablature distorted by projections, the niches inelegant, the windows mean, with preposterous embellishments, the altars disproportioned, and the ornaments of the cupola whimsical and irregular. The subterraneous church has a wonderful level vault, and well adorned with stuccoes; but the columns, although composed of fine marble, are badly placed; and the isolated altar, although rich in stone, metals, and work, abounds in architectural defects. Finally, the façade is a mixture of columns and pilasters. The columns are connected; and

one pilaster projects beyond the others. It is of two stories ; the first Ionic, the second Composite. The first rises from a level basement, but does not follow a right line, the columns being placed in a curve. This façade is of a mixed figure, convex in the centre, and straight at the sides. The cornices are abruptly broken, the pediments useless, and the projections too great : it is terminated not in a point, but in a level line, and consequently the insignificant pediment appears placed there merely to be disgraced by the heavy armorial bearings and the two statues. From the square form of the façade, and from the plan of the church, being that of a Greek cross, with a cupola in the centre, it appears that the idea of the architect was to make the cupola the apex of the façade ; but this cannot be seen at less than half a mile distant. The form alone is good, the remainder is heavy and in bad taste. Had the façade been confined to one order, the cupola would have had its proper effect, and the whole church have appeared to sustain it.

A good painter is not always a sculptor and architect. Pietro da Cortona was thought one of the first painters of his age. Architecture, however, is but little indebted to him ; and we have just cause to be displeased that he should have treated her with so much caprice. Far from remedying any defects, he has multiplied the liberties already taken. His plans, notwithstanding, were learned and clever, his stuccoes elegant, and in the *tout ensemble* he has preserved an air of solemnity. But these valuable qualities are by no means equal to the extravagance which he has used in the orders, mixing columns and pilasters together, and using undulations and unnecessary projections.

Painting is not more indebted to him, if we rely on the opinion of Raffaello Mengs, who died at Rome, June 28, 1779. “ Pietro da Cortona, from his great genius not allowing him to follow the style of the excellent painters

who preceded him, invented an entirely new style, devoting his talents to composition only, to the almost total exclusion of invention."

"His whole attention was directed to the number and proper disposition of his figures, without considering whether they belonged to his subject; a practice the direct opposite of the Greeks, who generally represented few figures in a picture, in order to make their excellence more evident. The Cortona school, which has extended further than is desirable, allows of a number of figures, to conceal each other's imperfections."

Pietro da Cortona died at seventy-three years of age, of the gout, which had disabled him for some time, and was buried with great solemnity in Santa Maria Martina, within the gate of which is his sepulchral stone; and at the foot of the staircase, leading to the subterraneous church, the academy of St. Luke placed a marble bust of him. He had a fine countenance, was of a good stature, and a majestic deportment; his manners were mild and agreeable, his answers prompt and decisive, but circumspect; his opinions moderate, and his temper equal. He loved work, but at the same time allowed himself amusements; he lived moderately, but surrounded by every convenience; he used the riches he had acquired by his own industry, tempering parsimony with generosity, and, notwithstanding his ability in the fine arts, was free from all pride, and was generally beloved and revered.

FRANÇOIS MANSART, OR MANSARD,

A PARISIAN,

(Born 1598, died 1666,)

Was endowed with inclinations the most fortunate for the study of architecture; an exquisite taste, a strong mind,

a habit of meditation, a fertile imagination, and a most indefatigable attachment to employment. His ideas for the general design of an edifice were great and noble; and his choice in the outlines of all the members of architecture, which he used in various ways, was delicate and appropriate. That this character is just, those will assert who have examined his edifices which decorate Paris and other parts of France; as the church of the Feuillans, in Rue St. Honoré, that of the Enfants Trouvés, in Rue St. Antoine, part of the Conde palace, that of Blezancourt, Toulouse, the castle of Choisy sur Seine, that of Gesvres en Brie, des Maisons, and others, with gardens, &c. His first work was the restoration of the hotel of Toulouse in 1620, and the last that of the Minimi, 1679.*

The church of the Visitation, Rue St. Antoine, is a small rotunda, ingeniously executed. The cupola is 43 feet diameter, and 80 in height: four large arches support the vault, and it is decorated with eight Corinthian pilasters, surmounted by an entablature of a fine outline, without a cymatium. The sculpture is heavy and semigothic. The façade has an appearance of heaviness, contrary to that of the interior; the doors and members are small.

His principal work is the façade of the Minimes, in the Place Royal, in which the greatest study has been used to make the metopes perfectly square, where the columns group with the pilasters. The whole of the improvement

* Besides these, Mansard erected the chateau de Berny, and the chateau de Baleroy, in Normandy; the new chateau de Blois he entirely built; a part of the interior arrangements at the chateau Richelieu, and of Coulomiers; a great portion of that of Fresne, where is a chapel reported to be the model of the church of Val-de-Grace, at Paris; the hotel de la Vrillière, and that of Jars; a part of that called Bouillon; the portal of the Minimes in the Place Royale, as far as the second order; finished the hotel Carnavelt, Rue Culture St. Catherine, and added the elevation of the façade; the church of the Val-de-Grace; and gave designs for the completing the Louvre.

consists in confounding the bases and capitals of the columns with the pilasters. But which is the most objectionable,—that some metopes should not be perfectly square,—or that capitals and bases should be crowded together? By order of queen Anna of Austria, he began the church of Val-de-Grace, and carried it up to the summit of the interior cornice, afterwards continued by Gabriel le Duc. But the voice of envy informed the queen that immense sums were expended on this edifice; and, on Mansard being interrogated on the subject, he, unused to the arts of a courtier, answered the queen mother with some rudeness. The direction of the church was immediately taken from him and given to others, who altered it, by changing the design, and ornamenting it with heavy sculpture, on the model of the church of Val-de-Grace. Mansard afterwards built, in the palace of Fesora, a chapel, which is considered a perfect model.

Mansard is the inventor of the curb roof, which the French call *à la Mansard*; certainly not the best possible invention. This architect was never satisfied with his own designs, not even when praised by those who superintended. Whence he often did the same thing many times over, ever seeking to add some improvement. The celebrated Colbert having requested him to make a design for the façade of the Louvre, Mansard opened his portfolio, and shewed him a number of sketches for it. The minister was satisfied with them, and desired him to choose one, and put it in a proper state to be presented to the king; at the same time requesting him not to alter it. Mansard refused to accede to this condition, not liking to be deprived of the liberty of changing it when a better idea occurred to him, and this was the cause of Bernini being sent for to Paris.*

* In “*Recueil à Architecture Française*, par J. F. Blondel,” are given plans, &c. of some of the above works; and in the “*Recueil des Hommes Illustres*” is an account of this architect, by Charles Perrault.

CHARLES ERRARD, OF NANTES,

(Born 1606, died 1689,)

WAS chosen director of the academy which Louis XIV. had established in Rome. During his stay there, he employed himself in measuring and drawing the principal works of modern architecture, in order to make a supplement to "The Parallel of Architecture," by Chambray; but death prevented his completing this work.

The church of the Assumption, designed by him at Paris, near the gate of St. Honoré, is not a great evidence of his abilities. Although he had the two churches of Mansard as models—the Visitation and Ste. Marie, at Chaillot, from which he might certainly have drawn many beautiful ideas.

The principal façade of this church is preceded by a portico of six Corinthian columns, 2 feet and a half in diameter, surmounted by a triangular pediment. This portico in itself produces a good effect, but appears oppressed by what is above it; and this is again burdened with an awkward and gigantic cupola.

The interior is not treated more happily: the architecture is negligent, and the sculpture used in indiscreet profusion, and without taste. Perhaps the designs he sent from Italy were carelessly executed, which not unfrequently happens.

PIERRE LE MUET,

(Born 1591, died 1669,)

A native of Dijon, was versed in mathematics, and shewed his knowledge particularly in fortifying a number of places in Picardy, by order of the cardinal Richlieu. Muet was entrusted with the finishing of the church of Val-de-Grace, in Paris. He made a façade of two orders, Corinthian and Composite, with windows richly decorated with columns and a ballustrade. A canopy was afterwards made to the great altar, of six twisted marble columns, in imitation of those of Bernini, at St. Peter's in Rome, but placed on a circular story. The architect of this difficult deformity was M. le Duc, and the artist who sculptured it so admirably was Michele Angueir.

Muet also made the plans of the hotels Laigle, Luynes, and Beauvilliers, the chateau of Chavigny en Touraine, and that of Pont en Champagne. He composed a treatise on architecture, and translated Palladio on the Five Orders; also Vignola, adding to both a number of his own inventions and reflections.*

* In 1656, he commenced the church des Augustins, in the Place des Victoires, but died before it was finished. He published, also, a work in folio, entitled "La Manière de Bâtir pour toutes sortes de Personnes," which contains many plans and elevations.

COSIMO FANSAGA, OF BERGAMO,

(Born 1591, died 1678,)

BEING exceedingly attached to the arts, went to Rome to study sculpture and architecture under Pietro Bernini, father of the celebrated cavaliere. The façade of the church of Santo Spirito de' Neapolitani is the only work executed by him at Rome, and does not confer on him much honour.

He visited Naples, where he had so many commissions for statues and buildings, that he made it his residence. A cloister of San Severino, the great refectory and altar, were designed by him ; as was also the principal altar of the Madonna di Constantinopoli, that of the Gésu Nuovo and the two lateral ones, the staircase of the church of San Gaudioso, and the façade of the church of the Sapienza. He built and sculptured a number of altars in various churches of Naples.

The façade of San Francesco Saverio, of San Theresa degli Scalzi, and of the chapel of the treasury of San Gennaro, and of San Domenico Maggiore, were also by him.

The viceroy, duke of Medina las Torres, availed himself of the genius of the cavalier Fansaga to repair the fountain in the Strada Platamone, which was without water. Our artist removed it to the Largo di Castello, enlarged it, and supplied it with water. This is called Fontana Medina, the most beautiful fountain of Naples ; a character which it would better deserve if more simple. The fountain also in the street leading from the royal palace to Santa Lucia à Mare, is by Cosimo. He also designed the great gate and staircase of the palace of the duke Mataloni. The

catalogue of his works, performed during a lengthened and honourable life, would be too long for our present limits.

ALESSANDRO ALGARDI,

(Born 1602, died 1654,)

WAS born at Bologna. His father, a merchant, had him instructed in literature at an early age, and perceiving his strong inclination for drawing, placed him in the school of Lodovico Carracci, where Alessandro learnt the art. He afterwards studied modelling, and became exceedingly successful in sculpture. When a youth, he was introduced to the court of the duke of Mantua, and afterwards visited Rome, to study architecture; and remained there till the age of thirty-eight, solely occupied in repairing broken statues and modelling in plaster, neglected and despised, as one incapable of sculpturing in marble. At length his abilities were discovered, and he not only was acknowledged to possess merit as a sculptor, but also as an architect.

The renowned villa Pamfilj in Rome, without the Porta San Pancrazio, is all the work of Algardi, both with regard to the architecture and the ornaments. The designs of the Fountain, the plan of the villa, and the various and numerous arrangements, are all regulated with the most perfect judgment, and entitle it justly to its appellation, *Il Belrespiro*. It is universally confessed to be the finest villa of Rome. When the prince Don Pamfilj, nephew to pope Innocent X., entrusted him with this great work, not content with the designs of Raffaello and Giulio Romano, he went to Tivoli to copy some of the remains of Adrian's villa, and from these designed the bas-reliefs in

the beautiful vault of the ground-floor of the palazzino. In the plan of this palazzino he imitated one of Palladio's, well suited to the situation. In the centre is a round hall, lighted from the top, and surrounded in the interior by square rooms. In the four angles, occasioned by the introduction of the circular hall within a square figure, is a winding staircase, a chapel, and other conveniences. One façade has a portico, flanked by rooms at one angle, and a mediocre staircase at the other, leading to an upper suite of apartments. It is astonishing that, in an edifice of such small dimensions, so many conveniences should be united. We cannot, however, praise the useless and preposterous arch of the portico, which cuts the floor of the apartment above, nor the excessively high plinth which supports the pilasters of the round hall. The opposite façade is elegant and correct.*

For the same Don Cammillo Pamfilj, Algardi erected the great altar in the church of San Niccola da Tolentino, which is full of architectural errors. The church itself was built by Giovanni Maria Baratta, a sculptor and architect, and pupil of Algardi; it is by no means a happy effort.

The façade of the church of Sant' Ignasio was also designed by Algardi. If purity of architecture had been united to the grandeur and richness of the marbles and sculpture, this would be one of the most superb façades of Rome. But

* This villa is situated about half a mile from Rome, on the ancient Aurelian Way. It was erected about 1644. The interior was decorated by Francesco Grimaldi. The gardens are very extensive, being nearly five miles in circuit; and from the most elevated ground may be seen the ocean, beyond the marshes which environ Rome. There are some beautiful architectural fragments amidst the walks, and well worthy of the admiration that has been bestowed upon them. The grottoes, the fountains, the cascades, &c. are all disposed with the greatest ability, and some have said by Le Notre.—*Choir des plus Celebres Maisons de Plaisance de Rome, &c. &c.*

it is of two orders, the lower of double Corinthian pilasters, on a wide flight of steps, with the entablature breaking over each couples of pilasters ; semi-pilasters are attached at the flanks of these, and the entablature above them also follows the form of their projections. Over this arrangement is an attic, with similar salient divisions, and cut in the centre by a circular pediment. The second order has Composite pilasters, placed on a plinth, and supporting a large triangular pediment, extending the whole width, inclining forward, and forming a corona to the edifice, surmounted with candelabræ. The roof is adorned on each side by balustrades, which are continued round the foot of the pediment in front. But however faulty the architecture of this façade may be, there is richness and style enough in its decoration to have caused the square to be preserved in front of it, instead of the houses which now surround it.* Innocent X. honoured Algardi with the title of Cavaliere di Cristo, and presented him with a collar of gold worth 300-crowns. He was an honourable man, gentle in his manners, and in his discourse lively and acute. He died at fifty-two years of age, and was buried in the church of Santi Giovanni and Petronio of the Bolognese.†

* Plans and elevations of this church, as well as many others in Rome, may be seen in a work, entitled "*Insignium Romæ Templorum Prospectus exteriores, interioresque à celebrioribus Architectis inventi nunc tandem suis cum plantis ac mensuris, à Jo. Jacobo de Rubeis, Romano, suis typis in lucem editi ad Ædem Pacis; cum privilegio summi Pontificis, anno 1684.*"

† For an account of the works in sculpture and painting executed by Algardi, see "*Vite de' Pittori, Scultori, &c. di Giambattista. Passeri.*"

OTTAVIO REVESI BRUTI,

A nobleman of Vicenza, and well acquainted with architecture. There are a number of excellent buildings at Brendola belonging to the family, all from his designs.

He was author of a work entitled “*Archisesto per formare con facilità i cinque Ordini di Architettura,*” &c. This instrument, invented by Revesi, is a species of proportional compasses, useful not only to architects, but also to others studying and practising the sciences.

JACQUES VAN-CAMPEN, A DUTCHMAN,

(Died 1658.)

Was born at Harlem, of an illustrious family, and was lord of Rambrock. He followed painting as an amusement; and an anecdote is told of him, to which, however, we are not obliged to give credit. Whilst on his road to Rome to perfect himself in the arts, a lady took him by the hand, and offered to predict his fortune; and told him, that though going to Rome for the purpose of becoming a painter, he would leave it an architect; that the city palace of Amsterdam would be destroyed by fire; and that he would rebuild it much more beautifully. Campen laughed at the prediction, as any other reasonable man would have done. He, however, became an architect, and rebuilt the palace after its conflagration.

This edifice is built on 13,659 piles, well united together. In so marshy a soil no other foundation could be effective. The plan is almost a square; it is 282 feet long, and 255 wide; and its height 116 feet. There is a profusion of marbles, jaspers, sculptures, and paintings. This palace cost more than thirty millions of florins. It is the finest edifice in Holland, and the description of it occupies one thick folio. The ground story in the principal façade forms the basement, on which rises an order of Corinthian pilasters, containing two ranges of windows; then an entablature, and above this a repetition of similar pilasters and windows. The latter are simple, and have no ornament except a festoon between each range. At the angles are two pavilions, ornamented with four pilasters, and, in the centre, one with eight, which projects forward a little. At the summit of this is a pediment, ornamented with historical bas-reliefs, together with an elegant cupola for the clock. Instead of one large door are seven small ones, alluding, it is said, to the seven united provinces. The architecture of this palace possesses no very extraordinary merit.

Campen erected a number of other edifices in Amsterdam, a theatre, mausolei for several celebrated admirals, and a palace at the Hague for the prince Maurice of Nassau. His birth, as we have already said, was noble, but his soul was still more so: he never would receive any remuneration either for his pictures or designs, but was always ready to devote his time and talents wherever they might be useful;—a noble example for the rich and great.

FRANCESCO BORROMINI,

(Born 1599, died 1667,)

WAS born at Bissone, in the diocese of Como. His father was an architect, and much employed by the Visconti family. After Francesco had been to Milan to learn sculpture, he went to Rome, at seventeen years of age, and was under the direction of Carlo Maderno, his relation, who taught him architecture, and also had him instructed in geometry. He copied and arranged all Maderno's designs, and sculptured the cherubim at the sides of the small doors, with the baskets and festoons above the arches in the façade of St. Peter's, which are the only productions from the chisel of Borromini. There are also some tolerably good pictures by him, among which is one belonging to the fathers of the Chiesa Nuova, at Rome. On the death of Maderno, he was appointed architect of St. Peter's, or rather nominated as such, under the direction of Bernini. He soon became ambitious, then envious, and finally the enemy of his master, endeavouring to supersede him in all his offices. He was employed in a number of edifices, and thinking himself superior to the former architect, departed from all established rules, and in a desire for novelty, fell into an excess of extravagance.

Amidst the numerous catalogue of his buildings the following are the principal:—

At the extremity of the court of the Sapienza, a church with a concave façade, the interior plan of which is polygonæ, the sides of the figure being semicircular. The same play of outline is attempted on the exterior, and the whole is surrounded above by a balustrade. The cupola

is entirely formed of steps broken by counterfeits, and nothing can be more absurd than the lantern above, from which rises a spiral flight of steps, supporting a metal crown, with the ball and cross at top.

But the most extravagant effort of Borromini is the church of San Carlino, at the Quattro Fontane, composed of right angles, concaves, and convexes, columns above columns, of different diameters, windows, niches, and sculptures, which are all crowded into a very small façade.

The oratory of the fathers of the Chiesa Nuova has also a façade of circles and straight lines, in perfect confusion, like the head of the poor architect, who being determined to do what no one else had attempted, made the cimasiom undulating, which, instead of facilitating the course of the water, impeded it; placed delicate mouldings under heavy weights; projected only the architrave of the entablature; and practised contortions which appear the result of perfect madness. Yet, amidst so much folly, there is a certain harmony and elegance, much more suitable to a casino di villa than to a sacred edifice. We must, however, admire the level vault in this oratory, which is much larger than the subterraneous one of Santa Martina, by Cortona. It sustains the weight of a spacious library above; one of the largest sides is not strengthened by buttresses. The habitation of the Padri dell' Oratorio is one of the best buildings of Borromini, but it is still not free from extravagancies; such as the porticoes and loggie of the cloisters being supported by one single Composite pilaster. The small clock tower is also a mixture of lines.

In the church, and part of the college di Propaganda Fide, Borromini's fancies are evident; but the cupola and campanile of Sant' Andrea delle Fratte are in a better taste.

The great nave of San Giovanni Laterano was modernised, as we now see it, by Borromini, and its entrance has

a curved form. This artist appears to have had a great objection to a straight line.

The niches, ornamented with columns of verd-antique, with a corona in the entablature, are of an ingenious invention. But the outlines are irregular and whimsical, the turning of the arches above are broken, and the consoles, which support the before-mentioned columns, instead of pedestals, are insufferable. This nave is, however, well decorated, and a great part of the cornice is suppressed.

Borromini's best work is the façade of Sant' Agnese in the Piazza Navona. Upon a wide flight of steps rises a single Corinthian order, which forms a right line in the centre, and a concave one on each side. Above is a balustrade, over which rises the cupola, also by Borromini, which is more pointed than it should have been. On each side is rather an elegant campanile. The pediment in the centre is unnecessary, and the doors and windows devoid of grace. For these and other works our architect acquired so much fame, that the king of Spain, wishing to modernise and enlarge his palace at Rome, entrusted the work to Borromini. He made a design for it, which was never executed, but which so well pleased the monarch that he honoured the author with the cross of St. James, and presented him with 1000 pistoles. Pope Urban VIII. also declared him Cavaliere di Cristo, and gave him 3000 crowns and a pension.

He was also employed in the Barberini palace, built the church and monastery of the Madonna de' Sette Dolori, at the foot of San Pietro Montorio, modernised the Falconieri palace in the Strada Guilia, erected that of Rufina at Frascati, embellished the Spada palace near the Farnese, making, among other things, a staircase similar to the scala regia in the Vatican. It is said that the façade of the Pamfilj palace, on the side of the Collegio Romano, is

by Borromini. This piece of architecture is light, but destitute of magnificence; the divisions of the stories are small, and the arrangements of the windows on the principal side out of all order. This design was, however, followed in the two other façades of the palace, one on the Corso, by Valvasori, the other on the Piazza di Venezia, by Paolo Amalj, producing together an assemblage of deformity.

Borromini executed many other works, and sent designs into various countries, which brought him both fame and riches, but not appearing to have acquired the reputation of Bernini, he fell into a state of melancholy, to dissipate which he made a journey through Italy. Returning to Rome, he passed his time in solitude, solely occupied in drawing whatever suggested itself to his imagination. After having made a large collection of these whimsical inventions, he determined to have them all engraved, that the learned might know the strength and extent of his genius. While presiding at the printing of this work he was seized with so violent a fit of hypochondriacism, that in the course of a few days he was scarcely to be recognised, and his disease increased so rapidly that he became a perfect madman. His nephew was advised by the physicians and priests neither to leave him to himself, nor to allow him to study. This restraint only irritated him, being continually accustomed to employment. Borromini could not endure such inactivity. He asked for his instruments, but they were constantly denied him: at length a pulmonary complaint came on, attended by uninterrupted frenzy. During an excessively hot night, the wretched man, not being able to rest, and having in vain requested paper and pens, was heard to exclaim that such a life was insupportable, and springing furiously from his bed, he wounded himself in various parts of his body with a sword which was incautiously allowed to remain in his room. His servants hastened to him, and

prevented his terminating his existence at the moment ; however he lingered but for a short time.

His constitution was strong, his countenance by no means unpleasant, although a little heavy, and sun-burnt ; he was tall, with thick black hair. His manners were unblemished, he was grateful and disinterested, as a professor of the liberal arts should be, never requiring a remuneration for his labour. He was so jealous of his designs, that, lest any one else should have the credit of them, he caused them all to be burnt before he died. He never would make designs in union with another, saying, that his works should stand or fall by their own merits. His only pupil was his nephew, who inherited his immense wealth, and relinquished the profession of architecture.

Borromini was one of the first men of his age with regard to the fertility of his genius, and one of the last for the ridiculous use he made of it.

In architecture he was what Seneca was in literary composition, and Virgil in poetry. At the commencement of his career he was content to copy, and did well ; but actuated by a mad desire of surpassing Bernini, he followed his own ideas, and became guilty of a species of heresy. He thought to be considered famous by his novelties. His undulating and zig-zag manner, his departing from simplicity in his ornaments, which is, however, the basis of all beauty, his profuse adoption of embattlements, united columns, and broken pediments, led him into every species of extravagance.

Amidst, however, his greatest deformities, a certain grandeur, harmony, and elegance, may be discovered, which shew he possessed talent. Had his genius sought for real beauties in architecture, had he devoted himself to correct the abuses which had insensibly crept into the practice of the greatest men ; had he sought the true and still unknown proportions, suited to the different characters of edifices, and amended the members of the orders,

he would have practised novelties which would have proved useful to society, and would have rendered him superior to all his successors, not excepting Bernini. He mistook the road, and the common herd of architects, dazzled by his false glitter, have followed his manner, but with that inferiority naturally arising from an inferiority of genius.

Borromini's extravagant departure from all beauty and regularity in architecture, has caused his enemies to condemn him in every thing, whereas he certainly deserves some credit for the solidity and convenience of his arrangements. When right and wrong are so closely allied, we are too apt to confound them together; or, if we make any selection at all, such is the perverseness of human nature, that it will generally be in favour of error.

LOUIS LE VEAU,

(Died 1670,)

A celebrated French architect. His talents were of the highest class, and he practised his profession with that assiduity and activity which are requisite to undertake and execute great projects. He held the situation of first architect to the king, and was principally concerned in the enlargement of the Tuilleries, in which is an immense gallery, 1362 feet long and about 30 wide. He ornamented it with a Composite order, which has this peculiarity, that the modillions of the cornice project almost a third before the lower cimasiun, which has the effect of reducing the height of the other members; the corona is too low, and the mouldings of the architrave too complicated. He also constructed the gate of the Louvre, the

great mass of building at the sides of the park of Vincennes, in the Doric court of which he increased the height of the columns one module, in order to enlarge the frieze, and thus render the metopes and the triglyphs regular. He made the design for the palaces of the famous Colbert, those of Lambert and Hensselin, de Lionne Vau-le-Vicomte, for the celebrated M. Fouquet, with large gardens, laid out by Le Notre, in which is a canal 500 toises long and 20 broad, terminated by a grotto, ornamented with niches and termini.

In the latter palace, the want of unity between the centre ornamented with two orders, and the sides with one order only, embracing the two stories, is singular. A worse effect could not be produced. There are other barbarisms in the general proportions of the whole. He made the design for the college des Quatre-Nations, of a new form, with a mixture of right lines and curves, and many other improprieties in the decoration. He also designed the church of Ste. Sulpice, which was afterwards confided to the superintendance of Messrs. Gittard, Oppenort, and other architects, which has occasioned a change of style essentially injurious to the whole; the ornaments are profuse, and badly placed. He died at Paris,* and his works were completed by his pupils, Lambert and François d'Orbay, who also built the church to the college of the Quatre-Nations, and various works to the Louvre, the Tuilleries, and elsewhere.

* This architect was born in 1612, and is known only by his works. He erected a palace for M. Bordier, called Livry, now Rincy, and the Hotel de Pons, rue St. Dominique de Pontchartrain. Cardinal Mazarin employed him at Vincennes. François d'Orbay designed and executed the church des Premontres, destroyed in 1719; that of the Croix Rouge; the Chenil Neuf de Fontainebleau; the convent of the Capuchins; the ancient hotel of the French comedians; at Lyons, the portal of the Carmelites; the gate du Perou at Montpellier. He died in 1698, and left a son, Nicholas, who was appointed comptroller of the royal edifices. — *Vie des fameux Architectes, par M. d'Argenville.*

GIACOMO TORELLI, OF FANO,

(Born 1608, died 1678,)

THE son of Pandolfo Torelli, a nobleman of the city of Fano, and cavalier of the order of Santo Stefano. He had a singular talent for theatrical architecture, and invented a variety of scenic machines, which from their novelty were so much admired, that his fame extended to Venice. In that city he produced many others, with various decorations, which were afterwards published. It was in the theatre of San Giovanni and San Paolo, at Venice, that he erected a machine which, by means of a lever or crane, impelled by a weight, changed the whole scene at once. The invention has been commonly used since in most theatres. But envy excited some miscreants to assault this ingenious artist, and wound him in the right hand so severely, that he lost some of his fingers. Notwithstanding this misfortune, he, however, succeeded in using his pencil and designing with elegance. He afterwards went to France, where his extraordinary machines and fireworks made him the favourite of the court and of all Paris. Louis XIV. engaged him in his service as royal architect and machinist. The famous theatre at Paris, called Le Petit Bourbon, was built by him; and in a variety of entertainments given there, he evinced ideas so entirely new and surprising, that the people surnamed him "the great sorcerer," it appearing to the French that such extraordinary powers could only be the result of something superhuman. Torelli published a description of all his scenes and machines, accompanied with engravings; and the celebrated Corneille, for

the arrangements of his *Andromeda*, eulogises the sublime talent of the architect.

While at Paris he married Madame de Sué, a lady of noble birth, by whom he had no issue. Finally, after having made a large fortune, he took leave of the monarch, and, in 1662, returned to his own country. He then, in conjunction with five other nobles of Fano, built, at their own expense, the theatre of Fortune, which, for size of scenery, and elegance of architecture, is renowned throughout Italy, and indeed all Europe. When, in 1699, the theatre of Vienna was burnt, the emperor Leopold wished it rebuilt on the model of that at Fano.

Besides this worldly memorial of his abilities in his profession, Torelli was desirous of leaving to his country one of his piety, viz. a model of the Santa Casa of Loreto, which he made and painted, establishing a fund for the celebration of a pompous procession every year. He died 1678, when the king of France had sent him repeated entreaties to build a theatre at Versailles, and other stately buildings. He was buried in the church of San Pietro, in Valle de' Padri Filippini of Fano, where, on the 1st of October, a magnificent scaffold is erected, made and painted by Torelli himself, who, by his will, prohibited the destruction of this funeral monument, and desired it should be perpetually erected amidst an immense number of torches on the anniversary of his death:—so true is it that vanity is the ruling passion of man.

GIROLAMO RAINALDI, A ROMAN,

(Born 1570, died 1655,)

MANY of his relations were professors of drawing. Adriano, a painter and architect, had three sons, who all professed those arts. One of these, Tolomeo, probably a disciple of Michael Angelo, was a civil and military architect, a philosopher and well acquainted with jurisprudence; he settled at Milan, where he held the office of architect to the royal house and fortifications. He had two sons, Domizio and Giovanni Leo, who following their paternal profession, were called Tolomei; they succeeded to the offices of their father, and built a number of edifices and fortresses in Milan, in the states, and in the Valtellina.

Another son of Adriano was named Giambatista, also an architect, and was employed in the fortifications of Ferrara, in the works of the Ponte Felice at Borghetto, and at Velettri on the Fountain, and other public conduits. He erected a number of buildings at Rome, where he married and had a son named Dominico, a painter and architect.

Lastly, the third son of Adriano was Girolamo, a pupil of Domenico Fontana, who having an order from Sixtus V. to design a church at Montalto, his native place, and from his various occupations not being able to make the drawing, entrusted it to Rainaldi. Fontana presented it to the pope, and observing him much pleased with it, said to him, "Holy father, this design is not by me, but by a young Roman of great ability, whom I am desirous of introducing to your holiness." The pope pleased at the incident, desired to see the young man, and finding him intelligent and active, ordered him to execute the building for which he had made so elegant a design. This was the dawn of

Rainaldi's fortune ; and a lesson was given to architects to act with generosity towards each other, and more particularly to their pupils.

Rainaldi then finished the Campidoglio, constructed the gate of Fano, under Paul V., built the house for the professor of the Jesuits in Rome, and their college of Santa Lucia at Bologna. At Parma, he was in the service of the duke, and built his palace, and also that of Placentia and Modena, and the casino of Villa Taverna for the house of Borghese at Frascati, which he laid out very conveniently, and the altar of the Pauline chapel in Santa Maria Maggiore. He constructed the bridge of Terni over the Nera, consisting of only one arch of considerable length, and of good proportions. The grand Pamfilj palace in the Piazza Navona is his architecture. The Ionic columns of the centre pavilion are connected ; above are two orders, somewhat heavy ; then a large attic. The edifice is extensive, but the architecture mediocre : the apartments rather low, and the ornaments to the windows not very correct. This palace was spoilt by the strange fancies of Innocent X., who was rather a singular character. Rainaldi commenced the building of the church of Sant' Agnese, contiguous to the last named palace ; but paying more attention to the order of Don Cammilla Pamfilj, nephew to the pope, than to the pope himself, the latter on going one day to view the building was so displeased, that he deprived him of his office, and gave it to Borromini, who finished it. At the canonisation of Sant Carlo Borromeo, 1610, the whole of the decorations of St. Peter's, both on the exterior and in the interior, were his designs. The beautiful church of the Padri Scalzi at Caprarola is also his work. He went twice to the marshes of Tuscany, called the Chiane, on account of the differences between the grand duke and the court of Rome concerning them. He died at eighty-five years of age, and was buried in Santa Martina.

CARLO RAINALDI,

(Born 1611, died 1641,)

SON and disciple of Girolamo. After having studied geometry and the belles lettres, he became renowned in architecture, and maintained the honour of his family.

Pope Innocent X., who had tried the abilities of Carlo by a number of designs and buildings, commissioned him to continue the church of Sant' Agnese on the piazza Navona. The plan of this edifice does Rainaldi great honour; it is a light, elegant, and well-proportioned Greek cross, and if the angles were not spoiled by the projecting pilasters, which create a confusion of bases and capitals, it would be a most complete work. He carried it up to the entablature: the rest, as we have seen, was finished by Borromini.

The same pontiff deputed Rainaldi head of the assembly appointed to examine into the state of the campanile raised by Bernini over the façade of St. Peter's, and to determine whether it should remain or be taken down. Rainaldi took infinite pains to prove how false was the idea of danger suggested by the enemies of Bernini. The campanile was, however, destroyed. Rainaldi made various designs for others, lighter and more suitable; but St. Peter's is still without, nor does it appear likely ever to have one.

Rainaldi made besides four designs and models for the piazza before St. Peters; one of a square figure, one circular, the third a long elipsis, and the fourth hexagonal. The whole four were ornamented in the same manner, with dwellings above for the conclave and family of the

pope; but Innocent X. died, and these designs were never executed.

The monument of the cardinal Bonelli within the church of Minerva, at the small portico in the way to the Collegio Romano, was erected by Rainaldi. By order of the cardinal Lauria, he modernised the church of the Santi Apostoli; but the portico does him little honour, which he built on a weak foundation of ancient walls: its duration was short, and it was afterwards rebuilt, as we shall see, by Carlo Fontana. Little worthy of praise, also, is the façade of Gesu Maria, on the Corso, of one single Composite order of pilasters, on pedestals such an immense height, that they are two-thirds above the door; the use of the Composite on the exterior, and the Doric in the interior, is a deviation from all correctness. In the church on Santa Maria, in Campitelli, he did still worse; the errors are so numerous, that an experienced eye cannot endure to look on it. It, however, pleased pope Alexander VII. exceedingly, by whose order it was built, as it may many others who are dazzled with a forest of columns, and a quantity of stone worked in various ways.

Little can be said for the façade of Sant' Andrea della Valle, also by Rainaldi, and esteemed the most stately, after St. Peter's. The style is almost the same with that of Sant' Ignazio. It is, perhaps, rather larger; the columns are coupled, but each is on a separate pedestal: it has projections, and pediment above pediment, with many other absurdities.

Rainaldi made a design for the façade of San Carlo on the Corso; but it was rejected, and the directors chose a certain priest Menicucci, and a Capuchin friar, Mario da Canepina, with whom they produced that terrible façade of columns so disproportioned to their width. The twin churches at the Piazza del Popolo, one called the Madonna de Miracoli, the other di Campo Santo, are both by

this architect. The cardinal Gastaldi wished to erect a façade to San Petronio di Bologna, which church, since its commencement, 1390, by one Maestro Arduino, has remained without one. Notwithstanding that the principal architects of Italy have made both models and designs for it, the idea of the cardinal was frustrated, his vanity inducing him to require his arms being placed over the temple, and the noble senate of Bologna, from another species of vanity, not acceding to his wish. The cardinal Gastaldi withdrew in anger to Rome, and Rainaldi executed two small temples, by his desire, one circular and the other elliptical, both with equal cupolas and small graceful porticoes of isolated Corinthian columns. The centre intercolumniation would be better, if it were larger than the lateral ones; the columns at the side of the small doors might be spared, and either the pediment, or the balustrade which surrounds it, should have been omitted. The interior is by no means a fortunate effort: the chapels are too recessed and dark, and some of the large arches appear oppressed by the projection of the cornice, some of the arches are also circular on the plan. These churches were finished by Bernini and Carlo Fontana; and we cannot say to which of these architects the errors belong.

Rainaldi erected that part of Santa Maria Maggiore fronting the obelisk. The *tout ensemble*, with the wide flight of steps, and the projecting curved or convex centre, is beautiful; the windows are in a bad taste, the niches still worse, being much too small for the large statues which they contain, and the breaks are too numerous. He also built the sepulchre of Clement IX. in this church.

The Duomo of Ronciglione, the elegant church of Monteporzio, and the greater part of the gardens of Mondragone and of the villa Pinciana, are his designs. One of the most considerable works by Rainaldi, is the palace of the French academy, which belonged at first to the dukes of

Nivers. The large windows to the Mezzanines, above those of the ground floor, do not do him honour; and if less rich in ornament, they would have been more beautiful. He also sent a number of designs to Carlo Emanuele, duke of Savoy, who, besides other gifts, honoured him with the cross of Sant Maurizio and Lazzaro, which was presented to him publicly at Rome by the cardinal Maurizio of Savoy. Louis XIV. also sent him his picture enriched with gems, as a mark of his approbation of his design for the Louvre.

He accompanied Monsignor Carpegna to the Chiane, on account of the disputes still subsisting between Rome and Tuscany; and returned after having taken all the levels, plans, and designs, which were much approved of by the pope.

Rainaldi was animated and graceful in his demeanour, fond of pomp, and associated with the most distinguished persons, and of the first rank; who were also pleased with him, and made him many rich presents. He was a good Christian, and gave large sums in charity, and made an offering of all his jewels to the church of the Stimmate. He was attached to the professors of the arts and his friends; frank and sincere in conversation, and fond of music. He designed like a painter, and composed with facility; he executed with promptitude; his ornaments were bold, though not always correct, especially in the façades of churches; he practised the abuses and defects so commonly adopted by all those unacquainted with the first principles of architecture.

GIOVANNI LORENZO BERNINI,

(Born 1589, died 1680.)

His father was Pietro Bernini, a Florentine,* a painter and sculptor of no mean capacity; who, to study these fine arts more perfectly, went from Florence to Rome; whence, flattering himself with better fortune, he removed to Naples, and married Angelica Galante, who became the mother of Giovanni Lorenzo. Pietro again returned to Rome with all his family, by order of Paul V., to execute some sculpture in the Pauline chapel, in Santa Maria Maggiore. Under the direction of his father, and with so many examples, both ancient and modern, constantly before him, the talents of Giovanni Lorenzo found an ample field for development. When a child of only ten years of age, he sculptured a marble head, now in the church of Santa Prassede, which excites astonishment in all who have seen it. Paul V. was desirous of seeing this wonderful child, and asked him if he could draw him a head. "What head do you wish, holy father?" said the young Bernini: the pope, surprised at his question, desired one of Saint Paul, and in half an hour it was beautifully executed. The pontiff then recommended him to the cardinal Maffeo Barberini, the patron of letters and arts, in order that the seed might be sown to produce another Buonarroti. The pope, moreover, permitted the lad to take as many gold medallions as he could hold in both his hands. Bernini continued to work at his sculpture with the greatest ardour; and before he was seventeen

* Vita del Cavalier Giovanni Lorenzo Bernino, descritta da Domenico Bernino suo Figlio.

had executed a number of beautiful works, among which is the Daphne in villa Pinciana. So quick was his execution, that he may be said to have devoured marble; and he acquired so great a reputation, that when walking through the city, he became the object of general attention, and was pointed at as a prodigy. Praise, however, did not corrupt him, but rather excited him to greater efforts, which was still further encouraged by his father, who constantly told him that man never arrived at perfection, and that we may always improve. This is the only species of emulation which should be implanted in the minds of youth; an emulation excited by a consideration of their own works, and without reference to those of others, which too frequently degenerates into envy. It is related, that, being one day in company with a number of great artists, Annibal Carracci, on going out of St. Peter's, turned back to admire the old confessional, and exclaimed: "Can there be found any genius sufficiently sublime to make a confessional corresponding with so august a temple?" Bernini with a sigh said in a low voice, "Would to God that I may one day prove the artist you desire."

Gregory presented him with some considerable pensions, and created him Cavalier dell' ordine di Cristo. When his protector, the cardinal Maffeo Barberini, assumed the pontificate by the title of Urban VIII., he sent for Bernini, and addressed him thus: "It is fortunate for you that the cardinal Maffeo Barberini is become pope; but we are still more so, that the cavalier Bernini should live during our pontificate." This wonderful man then commenced those great works which he executed by order of the pope. He devoted himself, at the same time, to architecture and painting, without neglecting sculpture. When employed on the bronze altar or confessional in St. Peter's, the envious and the ignorant were not backward in observing the immense masses of bronze moved there, and sarcastically said, that the church of St. Peter would be turned

into a foundery. But they were silenced with astonishment on seeing the work completed. No good reason can be assigned for not placing it in the centre of the cross.* It must be evident to every one that it is not in a line with the bronze chair; and when looked at from one of the arms of the transverse nave, the greater portion of it is concealed: the flight of steps leading to the sacred crypt was most probably the preventive to this. Urban VIII. asking some one near him what he ought to give Bernini for so great a work,—the labour of nine years? “A chain of gold worth 500 ducats,” was the reply. “You shall wear the chain,” retorted the pope, “but Bernini shall have the gold;” and he presented Bernini with 10,000 crowns, and made one of his brothers a canon of San Giovanni Laterano, and to another gave a benefice of St. Peter’s. It would be superfluous to point out the absurdity of the twisted columns; their novelty, singularity, and difficulty

* The baldequino of St. Peter’s is one of the largest works in bronze at present known. Its plan is square: four twisted bronze columns of the Composite order, placed upon marble pedestals, support the crown, to which is attached the canopy. The columns are spirally fluted one-third of their height; the remainder is ornamented with branches of laurel and children. Four angels stand upon the entablatures over the columns, and assist in upholding the canopy. The whole height is 122 feet; viz. 11 feet 3 inches for the pedestals, 48 feet 4 inches for the columns, 11 feet for the entablature, 39 feet for the crown and canopy, and 12 feet 3 inches for the cross. Bonanni, in his “*Templi Vaticani Historia*,” says, that it contains 186,392 lbs. of bronze, and that the labour alone cost 100,000 crowns. Bernini, in his composition of this vast work, has taken up another form from that of the ancient *ciborium*, which was common in all churches, and usually composed of regular architecture. The present design was adopted, no doubt, to remove the idea of one building containing another, which to our architect would seem an absurdity. The style used for this work is well suited to its purpose, and exceedingly magnificent; but we must ever regret the spoliation of the Pantheon for its construction, the metal being taken from that building. “*Quod non fecerunt Barbari, fecerunt Barberini.*”

of execution have dazzled, and produced a number of imitators.

The Fontana Barcaccia, in the Piazza di Spagna, was designed by Bernini; but there is a little absurdity in sinking a boat to produce a fountain. The design of that of the Piazza Barberini is far superior: Glaucus, standing on a double shell, is supported by four dolphins, who spout forth an immense quantity of water, which falls over in the form of rain into the lower basin. At the desire of the same pontiff, he adorned the four piers which support the cupola of St. Peter's with niches, and in these were afterwards placed the four marble colossi; the Longinus being the work of Bernini.

These are the famous niches which served as a pretext for the malicious to raise a storm against this highly gifted man. On some fissures in the cupola being discovered, it was instantly reported that Bernini had weakened the piers by these niches, and the interior steps which lead to the ballustrade. We have already seen that these internal vacuums were left from the first building of the piers; and we shall hereafter see the true cause of the defects in the dome. It is said that Bernini having asked the sculptor of the Veronica, whence proceeded the wind which moved the cloth in the hand of the statue? the latter promptly replied, "From the fissures made by you in the cupola."

He was much employed in the Barberini palace, particularly in the staircases, the great hall, and the façade looking towards Strada Felice. The grand staircase is beautiful, majestic, and well-proportioned. The first story of the façade is a Doric well laid out; but the number of repeated entablatures, and the large arched windows, are not certainly to be admired. The façade of the Propaganda Fide is also the work of Bernini. This edifice was in danger of falling, when the architect planned the simple

sloping façade; thus ornamenting and strengthening it at the same time.

The fame of this excellent artist becoming universal, the king of England, Charles I., sent him a picture by the famous Vandyke, representing the countenance of the king in three different positions, in order that Bernini should make a bust in marble. He did it, and sent it to the king, whom it so much pleased, that he returned him a ring worth 1000 crowns, saying to the person whom he deputed to present it, "Go and crown the hand that has executed so beautiful a work," accompanying the jewel with other gifts of great value. The queen of England also wished her likeness, and wrote an extremely obliging letter to Bernini on the subject; but her misfortunes commencing soon after, that unhappy sovereign had other and more important affairs to think of. An English nobleman of great notoriety left his native country, and went directly to Rome to sit to Bernini, whom he rewarded with the liberality of a monarch, presenting him with 6000 crowns. He made various busts of sovereigns and men of the first rank. The cardinal Mazzarine wrote to him repeatedly, intreating him in the warmest terms to enter the service of the king of France, promising him 12,000 crowns a year. But the pope would not consent to it, saying, that "Bernini was made for Rome, and Rome for Bernini." Nor was he inclined to go, from his devoted attachment to the pope, by whom he was always treated in the most familiar manner. Urban VIII. one day said to his grand master of the ceremonies, that he should go to the house of Bernini, and amuse himself by looking over some of his great works. "Oh, holy father," replied Monsignor Depositario, "why such condescension? You lower the papal decorum." "Well, then," said the pope, "we must go and divert ourself with the children in our nephew's house." "That will be doing rightly," said the lord of formalities. "Indeed," rejoined the pope, smiling, "you

approve then of our becoming a child, but condemn our going to admire the greatest of men." The same day his holiness went with sixteen cardinals to visit Bernini.

At the persuasion of the pontiff, Bernini determined to marry, and at forty years of age he took to wife Caterina Fezi, daughter of an honest secretary of the company della Nunziata. He was but little inclined to the matrimonial life, not from any aversion to the sex, but from his great love for his profession. From the moment, however, of his entering the married state, he conducted himself with the steadiness and propriety becoming his new character.

Urban VIII., desirous of finishing the façade of St. Peter's, which, according to the design of Maderno, required two campaniles at the extremities, committed the execution of it to Bernini. The two lateral cupolas would of themselves have served for this purpose, and nothing would be required but to place the bells in them. However, an idea of so much simplicity has not entered into the mind of any one; or rather each architect employed has been desirous of adding to St. Peter's. Bernini erected one on the south side 130 feet high, of two orders, Corinthian and Composite, with an attic above.

The campanile was in itself good, indeed the best that had been designed for the purpose, but not in character with the beautiful cupola or the enormous façade. It was not finished when the façade began to give way, and even the tower itself to crack. The murmurs of the envious now broke into an open war against Bernini, and threatened the campanile with destruction. The meetings were frequent and clamorous; but a resolution was passed in favour of Bernini, it being determined that the foundations of the façade should be strengthened, the tower finished, and a corresponding one erected on the other side. This would have been done had Urban VIII. lived. Innocent X. of the Pamfilj family, having assumed the

triple crown, the anti-bernineschi faction took advantage of the pope when at his country retirement, and representing that the church was in immediate danger, obtained from him an order for its demolition, and without further delay the campanile was taken down.

The triumph of his enemies was now complete ; but the philosophy of Bernini supported him, who, during the whole course and sequel of the cabal never allowed himself to be the least discomposed ; and, tranquilly attending to his profession, made the design for the chapel of the cardinal Federigo Cornaro, with the group of Santa Theresa, and the angels in the church of la Vittoria.

With every good intention towards Bernini, we must allow him to have been too hasty in the erection of this campanile. He should have recollected who Maderno was, and the nature of the foundations he had made. But supposing the two campaniles to be really there, as we see them in some designs of the Basilica Vaticana, it is evident, that instead of elegance they would have produced confusion. Instead of finishing Maderno's unfortunate design, why was not all that he had so foolishly done taken down, and the Greek cross terminated with a consistent and majestic façade ? Time may possibly produce some courageous and enlightened pontiff, who will remove so much deformity from the most august temple in the world, and give it that perfection of beauty which it is so capable of receiving, and at the same time remove the vast Vatican palace, which, like a monstrous excrescence, is attached to the basilica.

Two years before the death of Urban VIII., Bernini erected that sumptuous sepulchre in St. Peter's, opposite the so much admired one of Paul III. In this sepulchre there are bees dispersed, alluding to the Barberini arms. A buffoon one day admiring it, in company with Bernini, remarked, that he probably meant to illustrate by these bees the dispersion of the Barberini family : — “ And are

you not aware," said Bernini instantly, "that bees, when dispersed, unite immediately on the sound of a bell?" alluding to the bell of the Campidoglio, which tolls at the death of the pope.

Innocent X. wishing to erect a fountain in Piazza Navona, ordered designs from several artists. The prince Lodovisi desired one to be made by Bernini, which, with the model, was taken to the Pamfilj palace, where the pope was to give his opinion on all. On seeing this design, his holiness was delighted, and having looked at it for some time, he exclaimed, "This is a manœuvre by the prince Lodovisi; Bernini must serve us, for if we see his designs we must order them to be executed." In fact, this fountain is a piece of enchantment;—it consists of a rock, from whence the water appears to issue, and around it are seated, in various attitudes, four colossi, representing the four principal rivers of the world, with the animals and plants peculiar to their respective regions. Bernini gave the figures to his pupils, reserving the rock for himself as the most difficult of execution. To its natural roughness he combined a certain degree of polish, which rendered it elegant and graceful; he divided it into four massive parts, in order to place on it the beautiful obelisk which the celebrated Thomas Howard, lord Arundel, was so desirous of taking to England. When this magnificent work was finished, previous to its being opened to the public, the pope went to examine it, and remained for above two hours within the enclosure, unable sufficiently to express his admiration of a design so well conceived and so admirably executed. When on the point of departing, he asked Bernini when the water would act: he replied, "That he could not exactly say; there were many things still to be done, but that he had given the necessary orders." The pope, at the moment of his going out, heard the noise of the water, which gushed in all directions from the fountain. The pontiff, with all his

attendants, stood in astonishment, and the former exclaimed, " Bernini, by this unexpected pleasure you have lengthened ten years of our life ;" and immediately sent to the house of his sister-in-law, D. Olimpia, for 100 pistoles, which he distributed among the workmen. It is said that Bernini, one day passing by Piazza Navona, drew down the curtains of his carriage, that he might not see his own work, as if he thought it defective, and meriting a blush. It is true that he was not a man easily pleased ; but this might arise from the bashfulness so natural to men of a modest disposition, when their works are seen by others, or exposed to public view.

In the other fountain of Piazza Navona, opposite the Pamfilj palace, some repairs being required : Bernini himself executed anew the dolphin and triton.

For the prince Lodovisi, he began the great palace at Monte Citorio, the principal façade of which resembles five bodies of building. Innocent XII., having afterwards, in some measure altered the design, he finished it for a court of justice, therefore called Curia Innocenziana. A structure so magnificent and well-arranged, that it may be called the finest palace in Rome, merits a long wide street opposite, and the adjacent ones more spacious and regular.

Alexander VII., of the Ghigi family, who esteemed Bernini, employed him on many works, among which, the most sumptuous is the Piazza of St. Peter's. Bernini chose an elliptical figure for this piazza, being prevented from using a better form, by the contiguity of the Vatican palace. It is ornamented by four files of travertine columns of the Doric order, with an Ionic entablature, and a balustrade and figures above. These four files of columns form three porticoes ; the great one in the centre is vaulted, the lesser ones architraved. To make the intercolumniations just, the architect should have encreased the number of the columns in proportion to the greater circumference of the

curves on the plan. In this piazza there are two objections; one, that, being situated at the greater extremity of the ellipsis, nothing, or very little, of the façade of the church is seen, which is inconvenient, especially in great solemnities, and when the papal benediction is given;—the other, that these porticoes serving as communications to the church, the curvilinear form is certainly inconvenient and unpleasant. This amphitheatre is altogether handsome; the pediments at the entrance, the pavilions in the centre, the obelisk, the two stupendous fountains, with the façade, the walled corridors, and double pilasters of the same order, produce a grand imposing whole. Between the corridors, Bernini made a superb staircase, with two inclined piazzas, leading to the vestibule. No one has ever ventured to build over these columns, because the soil was not solid; there is evident proof of this by the number of openings in the vaulting, although they are not very wide. It is reasonable to imagine that Bernini was aware of this defect in the ground, and therefore could not contemplate an edifice being built over it. This being premised, instead of a massive Doric, calculated to support a heavy weight, he ought to have employed a more slender order, as an ornamented Ionic, or Corinthian, either of which would certainly have been more consistent to the beautiful exterior of the whole basilica.*

* These porticoes are each 56 feet in width, and contain one hundred and forty columns; these are 40 feet high, including their capital and base, and their diameter 5 feet. Over the entablature are figures 15 feet 6 inches high, making the total height from the pavement 65 feet. Bonanni says that the entire work cost 850,000 crowns. This undertaking, the greatest of which modern times can boast, and which perhaps may vie with any of antiquity, was originally projected by Michael Angelo; at least he intended to have had an immense space or court before the temple; but it was reserved for Bernini to arrange and mature the plan, as well as to execute it. This he has performed in a manner which entitles him to be ranked with the greatest architects employed upon St. Peter's.

The work which cost Bernini the greatest labour was the flight of steps leading from the portico of St. Peter's to the chapel of the Vatican : this was at first a mere dark precipice ; the walls, though old and weak, could not be taken down, as they supported the Pauline and Sistine chapels, and the hall. The old hall was removed with some of the walls, the rest remaining apparently supported in the air ; and although Bernini and Carlo Fontana knew well that the supports were secure, they could scarcely enter the vacuum without horror. But of this obscure situation our ingenious architect was enabled to make a staircase, well lighted, majestic, adorned with Ionic columns, and the vault ornamented with roses ; so that, in fact, it appears rather that the place was adapted to the staircase, than the staircase to the place :—so well did Bernini know how to put in practice that rule which was continually on his lips, that the ability of an architect is best shewn in converting the defects of a place into so many beauties. For the further embellishment of the staircase, the vestibule, and the corridor, he placed at the end of the first an equestrian statue of the emperor Constantine, at the moment of his seeing the cross in the air. Even the enemies of Bernini confessed this to be the least faulty work ; while those who are enemies to no party, but the friends of truth and reason, will admire this work, though not imitate it. The staircase has two branches, both extremely long : the first with Ionic columns, the space between which becomes narrower as you ascend ; the second flight is more confined, and ornamented with doubled Ionic pilasters. The statue of Constantine is under an arch, not at right lines with the stairs.—These are points certainly not to be imitated, but excite our admiration towards Bernini, who so ably overcame all the difficulties attendant on so confined and disadvantageous a situation.

While Bernini was employed on such important works,

his attention was at the same time directed to the no less important one, the chair of St. Peter, which is entirely of metal, gilt, supported by gigantic statues of the same material, representing the four principal doctors of the church; two Greek—San Gregorio Nazianzeno and Sant Atanagio; and two Latin—St. Augustino and St. Ambrogio. The models for these statues proved too small at first, and Bernini's patience was exercised by having to remodel them. It is related, that when this chair was placed in its present situation, Bernini went to Andrea Sacchi, a celebrated painter, and entreated him to accompany him to St. Peter's, in order to give his opinion on the work: the painter, who was rough and unpolished, refused to take the trouble; but, at the reiterated and earnest request of Bernini, at length consented, and in his slippers and cap got into the carriage. On arriving at St. Peter's, he placed himself just at the entrance of the door; "This is the point," said he, "at which your work must be viewed." Bernini requested him to advance a little further, but he would not move a step. After having looked at it some time, "Those statues should be a foot higher," was his only observation; and he left the church. It is pretended that Bernini acknowledged the remark to be a just one. On this occasion, Bernini made use of the window behind the chair, which would probably have embarrassed another, and so advantageously, that it has now the appearance of being placed there on purpose to give a more resplendent effect to this incomparable structure. The expense of the whole amounted to more than 100,000 crowns.

By the order of the last-mentioned pontiff, he erected a number of edifices, among which, the palace of the Santa Apostoli, now belonging to the duke of Bracciano, is most remarkable. The ground floor is a pavement of plain rustic, on which rises an order of Composite pilasters, which, contrary to acknowledged rule, contains two stories.

The windows of the ground floor are short, perhaps to allow larger openings in the basement; those of the state floor are called picturesque, but not a picturesque worthy of imitation, on account of the small orders flanked by the larger ones, and the triangular and curved pediments. The upper windows are still worse, both in their form and ornaments; but the entablature, with large corbels in the frieze, single over the windows, and doubled under each pilaster, is most wretched. This entablature is surmounted by a balustrade, which does not accord in one respect with the wings of the façade, which are too low with relation to their length. The two large doors, which lead to a rectangular court entirely surrounded with porticoes in the interior, with ordinary arches, are badly conceived. The porticoes are too low, and the staircase, by no means magnificent, wants light.

The elegant church, the Noviziato de' Gesuiti, of an elliptical figure, is also of his architecture. In the interior are five chapels, placed in the recesses of the walls, the arches of which produce a bad effect on a curvilinear plan. The lantern is too heavy, and the frontispiece to the façade, supported by two columns at a distance from each other, with two fragments of a pediment, have no relation to the rest of the elevation.

Louis XIV. and Colbert, his minister, being both lovers of the fine arts, employed Bernini to make designs for the palace of the Louvre, in which edifice some of the first architects had exerted their talents. His designs pleased the monarch so much, that he sent him his picture set in gems, and wrote letters to the pope and Bernini, requesting the latter to go into France to execute it. The following is the letter of Louis XIV. to Bernini:—

“ SIGNIOR CAVALIER BERNINI,

“ Your talents have inspired us with the greatest esteem for you, and have excited in us an earnest desire

to see and know more particularly so illustrious a man, provided that our wishes be compatible with your duty to our holy father and your own convenience. This has induced us to dispatch a courier extraordinary to Rome, requesting you to give us the satisfaction of seeing you in France, and to take advantage of the present favourable opportunity of the return of our cousin, the duke of Crequi, our ambassador extraordinary, who will explain more minutely to you the urgent cause which makes us desire your presence, and will discourse with you on the beautiful designs which you have sent us for the building of the Louvre ; for the rest we refer you to our aforesaid cousin, who will inform you of our further good intentions. We pray God to have you, Signior Cavalier Bernini, in his holy keeping."

" From Lyons, 11th April, 1665.

(Signed) " LOUIS."

To the pope he writes thus :—

" HOLY FATHER,

" Having already received by the order of your holiness two designs for my palace of the Louvre, from so celebrated a hand as that of the cavalier Bernini, it would become me rather to think only of being grateful for this favour than to request fresh ones. But as it concerns an edifice which has been for many centuries the habitation of the most zealous kings of the holy faith that Christendom has ever produced, I feel more confident in addressing your holiness. I supplicate you, then, if your service allow of it, to desire the aforesaid cavalier to make an excursion to France, for the purpose of finishing his work. If at this present moment your holiness cannot grant me this favour, I have only to add, that no one at any time will receive it with more veneration from your hands than, holy father,

" Your devoted son,

" LOUIS."

The duke of Crequi, ambassador from France to Rome, having taken leave of the pope, was obliged to solicit another audience, for the purpose of making a solemn request to the pontiff, and afterwards went to Bernini, urging him to yield to the wishes of his sovereign. The pope granted him permission, but Bernini, who was already sixty-eight years of age, hesitated: but the father, Oliva, superior of the Jesuits, his most intimate friend, at length persuaded him to depart, in 1665. The preparations made for his journey, resembled a triumphal march. He was conducted to Paris as a man who honoured France by his presence. The grand duke of Tuscany ordered him a public entrance, and required the marchese Ricardi to treat him with the utmost splendour. He received similar honours at Turin. At Lyons, all the professors of the arts, and persons of the first rank, went out to meet him; and in every country he went through, the people so flocked in the streets to see him, that he was accustomed to compare himself to an elephant, or some *lusus naturæ*. The nunzio went out of Paris with the relays of horses to receive him, and he was conducted to the royal palace like one about to dispense happiness to the nation. The whole court and nobility vied with each other in paying him attention, and the king evinced to him every possible mark of friendship and generosity. Bernini having been brought to Paris with so much pomp, as the only man worthy of working for Louis XIV., was surprised on seeing the façade of the Louvre, towards St. Germain's Auxerrois, designed by Claude Perrault. On beholding this great work, he said publicly, that his coming to France was useless when she herself produced architects of the first rank. This trait of his sincerity and liberality does Bernini more honour than all his knowledge in architecture and statuary; and artists, instead of blaming the works of their contemporaries, would do well to imitate Bernini.

With regard to architectural works, for which Bernini went principally to France, he did nothing. He sculptured the likeness of the king in marble. One day that the king remained in the same position during an hour, Bernini cried out, "Wonderful, wonderful! so active a king, and a Frenchman, and to remain still for the space of an hour!" At another time, when Bernini was taking the likeness, he raised the hat on the forehead of the monarch, saying, "Your majesty is a king who may dare to face the world." The courtiers immediately wore their hats as Bernini had placed the king's, and hence this fashion was called also *à la Bernini*. Another of his witty repartees to the queen, when admiring this likeness of his majesty, was this—"Your majesty approves the likeness, because you admire the original." Some ladies having asked him which were the most beautiful, the French or Italian women,—he replied, "Both are beautiful; this is the only difference, blood flows under the skins of the Italians, and under that of the French, milk." During the eight months he was in France, he had five louis d'ors a day; and at last, a present of 50,000 crowns, with an annual pension of 2,000 crowns, and one of 500 for his son, whom he took with him. Such magnificent rewards do honour to the fine arts, but this shews more ostentation than reason, because it was not extended to those who were natives of France, in the same degree. On Bernini's return to Rome, he made an equestrian statue of Lewis XIV., in token of his gratitude, which is now at Versailles.

He only left a design for the façade of the Louvre, which is as well not executed. It consists of colossal orders, unequally distributed, containing two stories, with windows badly decorated; heavy corbels, in the frieze of the entablature, crowned by disproportioned balustrades; a rustic basement, without the due regard to the superior parts; and three large doors in the centre, destitute of grace.

Alexander VII. so much esteemed this great man, that

he twice visited him at his own house ; as did also Clement IX. Under this pontiff, Bernini embellished Ponte St. Angelo with those elegant balustrades which should form a part of every bridge, in order that passengers may have the pleasure of seeing the river. For the ornamenting this bridge, Bernini made two figures representing angels, one with the crown of thorns, the other with the inscription on the cross ; but the pope, not willing to allow of such beautiful works being exposed to the injuries of the weather, had copies of them made. The originals are now in the church of Sant' Andrea della Fratte, presented by the family of Bernini. He sculptured another secretly, and had it placed on the bridge ; it is that with the inscription on the cross.

When Bernini was eighty years of age, as a testimony of his gratitude to the queen Christina, his peculiar protectress, he devoted himself with the greatest attention to sculpture a figure of our Saviour, half as large again as life : this his last work received the highest commendations, but the queen refused to accept it, because not able to remunerate the artist as he deserved ; he therefore left it to her in his will. He died at the age of eighty-two, and was buried in Santa Maria Maggiore. His property amounted to 400,000 crowns, which to the queen Christina appeared a mere bagatelle ; saying to the prelate who gave her the information, — “ Had he served me, I should have been ashamed that he left so little.” Certainly some nephew of the pope may have possessed more ; but he was recompensed beyond his merit. His fame was greater during his life, than subsequently ; — a thing very uncommon.

Bernini was warm, irritable, and haughty in his demeanour ; though a good Christian, charitable, and averse to slander. His spirits were wonderful. He was very fond of plays, and recited a variety of characters with peculiar excellence, appearing to know Plautus and Terence by

heart, though never read by him. He invented a great quantity of theatrical machines; among these was a curious contrivance for making the sun appear and move in the scene:—the king of France requested the design of this. His talent was not only displayed in sculpture and architecture, but also in painting, and, although he only practised the latter as an amusement, he produced not less than five hundred pictures, the greater part of which are still existing in the Case Barberini and Ghigi. In the chapel of the sacrament, in St. Peters, is one representing the miracles of San Maurizio. Sculpture, however, was his favourite study, being enabled to continue at it for seven hours without intermission,—a fatigue of which none of his young men were capable. He sometimes remained hour after hour in thought, so that it was necessary always to have some one by his side, lest in his abstraction he should fall: he would never allow himself to be disturbed, saying, “Do not touch me, I am in love.” Could we sum up together all his idle moments, setting aside his hours for sleep and refreshment, they would not, in the course of so long a life, amount to a month. When at work, he never moved from politeness to any one; and whoever went to him, lords of the first quality and cardinals, they always seated themselves in silence, and watched his labours. He became extremely heated, even to exhaustion, and yet his profession was always his most delightful amusement. The queen, Christina, going one day to see him, he received her in the rough dress in which he was sculpturing, observing, “that this being the habit of his profession, he considered it more respectable than any other;”—the queen touched it several times, saying, “it was more precious than purple.”

In taking likenesses, he attended to the rules of truth, which consist, not as some imagine, in giving to the resemblance a smiling and pleasing air, but in expressing the true and peculiar character of the person and phy-

siognomy; thus, a melancholy countenance should not be made lively, nor a grave and majestic one, smiling and joyous. Bernini would not therefore allow the person to remain in the same position continually, but required them to walk about, that the body might assume an easy and natural attitude. Above all the ancient statues of Rome, even above the Laocoon itself, he preferred the Torso del Tevere, which is in the room in the centre of the two courts of the Vatican, behind the great niche; and the mutilated and deformed statue of Pasquin. It is related, that being one day asked by a foreigner which was the finest statue in Rome, and Bernini telling him the Pasquin, the foreigner, on seeing it, thought the answer a satire upon him. It appears that Bernini affected singularity in this instance; for the Pasquin,—whatever remains of good drawing a professor may find in it,—is so miserably disfigured, that it can never be thought a fine statue.

Bernini was accustomed to say, “that he was not the greatest man who was without fault, but he who committed the least; and that he himself had many, because he had executed the greater number of works.” After having finished a work, he always looked at it attentively, and if any beauty was wanting, or any error evident, he never looked at it again, nor was he ever satisfied with his own performances:—a misfortune common to all great men, and an important one, because even amidst the greatest applause they are internally discontented. The ignorant and presumptuous, on the contrary, are always satisfied, or at least affect to be so, and render themselves more insufferable by their self-approbation, than by their bad works.

As the character of Bernini's sculpture is the tender and soft, so in his architecture, lightness and elegance are conspicuous; which style always pleases the unlearned. He understood mechanics: he knew well how to adapt his plans to narrow and confined situations. In the *tout*

ensemble, his buildings are good and harmonious ; his manner of outline graceful, his ornaments elegant, though sometimes profuse. He used to say, that it was occasionally necessary to depart from established rules. This is a very equivocal maxim :—from the regular and decided rules of architecture, we should never depart ; but from those habits, which are more the result of pedantry and custom than reason, we are certainly allowed to deviate. From a want of this necessary distinction, Bernini, instead of relieving architecture from some of her abuses, rather encumbered her with fresh ones. He has generally preserved to each order its respective character. He was fond of broken pediments, and of placing them in improper situations ; he has adopted undulations, projections, and intermixtures of right lines and curves ; and instead of a beautiful simplicity, he substituted elegant fancy. The admirer of Bernini will say :—

Il est bien aisé de reprendre,
Mais mal aisé de faire mieux.

Let him, however, imitate Bernini wherever he has followed nature and reason, but no further.

Giovanni Lorenzo Bernini, had, among a number of brothers, one named Luigi, who was also a sculptor and theoretical architect, and tolerably clever in the invention of machines. It was he who contrived the wooden tower, 90 feet high, which is moved into St. Peter's with so much facility for the purpose of cleaning the walls ; he also contrived a balance, or steel-yard, for weighing the bronze used in the tribune.

AN ENTIRE CATALOGUE OF THE WORKS OF
GIOVANNI LORENZO BERNINI.

Profiles and Busts in Marble, &c.

Of Giovanni Battista Santoni, Maggiordomo of Sextus V., bishop of Tricario, in Santa Prassede.

Of Giovanni Vigevano, at the Minerva, in the third pilaster of the centre nave.

Of the cardinal Delfino, in Venice; and another profile of the same.

Of the cavalier Sourdi, at Paris.

Of the Cardinal Valerio, at Venice.

Of the cardinal Montalto, of the Peretti family.

Of Monsignore del Pozzo. — Of Monsignore Francesco Barberini, uncle to Urban VIII. — Of the mother and father of Urban VIII. — Of Donna Lucrezia Barberini. — Three of Urban VIII., and one of metal, all in Casa Barberini.

Of Monsignore Montoja, in San Giacomo degli Spagnuoli.

Of Paul V. and of the cardinal Scipione Borghese, in the Villa Pinciana.

Another of the same, in Casa Borghese, so beautiful, that when seen by Bernini forty years afterwards, he exclaimed, " Oh, how little progress have I made in sculpture, after so great a length of time!" and perhaps he said the truth.

Two of Urban VIII., in Casa Gori.

Of Costanza Piccolomini, in the gallery of Florence.

Of Don Paolo Giordano, duke of Bracciano, in Casa Orsini.

Of Innocent X., in Casa Pamfilj.

Another of the same, in Casa Barberini.

Two of Gregory XV., in Casa Lodovisi.

Two of Alexander VII., in Casa Ghigi.

Of the cardinal de Richlieu, at Paris.

Of Charles I., king of England.

Of the duke Francesco, at Modena.

Of Don Carlo Barberini, at Campidoglio.

Of Lewis XIV., at Paris.

Of Clement X., at Rome.

Of an English gentleman, at London.

Statues in Marble.

Of the cardinal Bellarmino.—Of Paul V., both in the Gesu.

A group of Eneas, of Anchises, and Ascanius.—David; a group of Apollo and Daphne.—Materasso, for the Ermafrodito, all in Villa Pinciano.

Group of Proserpine, in Villa Lodovisi.

Group of Neptune and Glaucus, in Villa Negroni.

San Lorenzi, in Villa Strozzi.

San Sebastiano, for the princess of Rossano.

Santa Bibbiana, in the church of the same name.

An angel at the sepulchre, in the Casa Delphino, Venice.

The Longinus, in St. Peter's.

Head and model of the statues of the countess Matilda, in St. Peter's.

A group of charity and justice, in the sepulchre of Urban VIII.

Constantine on horseback, in the portico of St. Peter's.

The Moor or Triton, in the Fountain of Piazza Navona.

The rock, horse, and lion, of the fountain in the centre of Piazza Navona.

Truth, in Casa Bernini. This is the statue which so much pleased the queen Christina, to whom, while looking at and admiring it, a cardinal observed, "Your majesty is the first crowned head who has been pleased at truth." She replied, "But truth is not always of marble."

San Girolamo, in the Ghigi chapel, at Sienna.

Daniel and the Group of Habakkuk and the angel, in the Ghigi chapel at the Madonna del Popolo.

Urban VIII. in Campidoglio.

Fonseca, with the crown in her hand, at San Lorenzo, in Lucina.

The cardinal Cornaro, at the Vittoria.

The angel with the inscription on the cross on Ponte St. Angelo.

The same, with another, bearing the crown of thorns, at St. Andrea delle Fratte.

Heads of a blessed and condemned person, at San Giacomo degli Spagnuoli.

An angel over the great altar, and another in the same church, Santo Agostino.

A bas-relief of Christ and St. Peter, called the "Pasce oves meas," over the gate of St. Peter's.

A colossal equestrian statue of Louis XIV. at Versailles.

A triton, in the fountain of Piazza Barberini.

The blessed Lodovisa Albertoni, in San Francesco a Ripa.

The sepulchre of Alexander VII. at St. Peter's.

The Saviour, his last work, a legacy to the queen Christina, of Sweden.

Fifteen fine heads, in various places.

Statues in Metal.

A silver bust, in Sant' Eustachio.

Urban VIII. at Velitri.

Of the same, in his sepulchre at St. Peter's.

Four angels in metal, in the pix of St. Peter's.

A large crucifix, for the altar of the royal chapel at Madrid.

Santa Francesca Romana, an angel and shrine, in the church of her name.

The chair of St. Peter in the Basilica.

A likeness of the cardinal de Richlieu, at Paris.

Works in Architecture.

Façade, staircase, and hall of the Palazzo Barberini.

The palace of Monte-Citorio.

The Jesuits' church of the Noviziata.

A church in Ariccia.

The church and cupola of Castle-Gondolfo.

The gallery and façade towards the sea, in the pontifical palace of Castle-Gondolfo.

The chapel Cornaro, at the Madonna della Vittoria.

The Silva chapel, at Sant' Isidoro.

The Fonseca chapel, at San Lorenzo in Lucina.

The chapel of Aleona, at San Dominico e Sisto.

The chapel of the Raimondi, at San Pietro Montorio.

The chapel of the Sirj, at Savona.

The sepulchre of Alexander VII. in St. Peter's.

The pix of metal and lapis lazuli, after the model of the small temple of Bramante, on the altar of the sacrament at St. Peter's.

The Baldaquino.—The sepulchre of the countess Matilda.—The piazza, the colonnade, and staircase, in St. Peter's.

The arch and ornamenting of the ducal staircase in St. Peter's.

The monument of Marenda, in San Lorenzo and Damaso.

Another in the church of Convertite.

The memorial of Suor Maria Raggi, at the Minerva.

The additions to the Quirinal palace.

The fountain of the Piazza Navona, with the erection of the obelisk.

The restoration of the Ghigi chapel, and of the whole of the church del Popolo.

The interior of Porta del Popolo.

Summer rooms, made in the time of Clement IX., at the Quirinale.

Ornaments of Ponte St. Angelo.

The arsenal of Civita Vecchia.

The villa of Rospigliosi, in the Pistojesse.

The altar in the Rospigliosi chapel, at Pistoja.

The lower altar of Santa Francesca Romana.

The altar in San Calisto.

The great altar in San Lorenzo and Damaso.

Facade and restoration of Santa Bibbiana.

Fountain in Piazza Barberini.

Ornaments of children, and medallions of marble, with the arms of Innocent X., at St. Peter's.

Pavement of the church and of the portico of St. Peter's.

The order and small lantern of the cupola of the Madonna di Monte-Santo.

The palace of the duke of Bracciano at Sant' Apostoli.

Scenes, &c., fireworks, scaffolds, masquerades, and other similar things.

CLAUDE PERRAULT, DE PARIS,

(Born 1613, died 1688.)

THIS architect excelled in a variety of sciences differing essentially from each other; and, what is still more extraordinary, he acquired them without the aid of a master. Educated for a physician, he became a painter, musician, architect, engineer, and anatomist. He made a design for the façade of the Louvre, which was preferred before many others, and so beautiful that it was deemed scarcely possible to be executed. The execution was, however, intrusted to Louis le Vau and d'Orbay. This superb façade fronts the church of St. Germain, and surprised Bernini; it certainly may be ranked among the finest pieces of architecture in Europe. On a very beautiful basement, containing a range of apartments, the windows of which are without much decoration, and with circular heads, rests the famous colonnade, 525 feet long, of coupled Corinthian columns, and fluted, 3 feet 7 inches in diameter, supporting bold architraves, 12 feet long. This colonnade has three breaks, one at each of the extremities and one in the centre. Over this is a pediment, embracing eight coupled columns; and the two inclined planes, forming this pediment, are remarkable, each being 54 feet long, 8 feet wide, and 14 inches high. The whole edifice is surmounted by a balustrade. In the removal and raising of these enormous masses, Perrault invented some new machines. There are many defects in this structure, among which are, the unnecessary coupling of the columns; and the opening of the principal door is too narrow, compared with the extent of the edifice. The arch of this door rises above the lower cornice, cutting into the supe-

rior story of the colonnade, with which it has no connexion. This error has been copied by Bott in the arsenal of Berlin. The façade contains but few windows, and has the effect of a loggia, or appears only calculated to be placed at the termination of a garden, for the purpose of viewing the prospect. Notwithstanding these and other defects, such are its beauties, that it is justly considered one of the finest buildings in France.

He built the observatory and the triumphal arch at the extremity of the Fauxbourg St. Antoine. The taste, richness, and grandeur of the latter design almost vie with those of antiquity; and had it been executed in marble, would have conferred immortal honour on Perrault and the whole nation. It was composed of stucco, and called *du Trône*, but exists no longer. It was 146 feet long in front and 150 feet high; dimensions far superior to that of Constantine or Septimius Severus. The order was Corinthian, the columns ten and a half diameters instead of ten; an addition which appeared necessary in order to give a greater degree of elegance, and to harmonise it with the light sculpture with which this ingenious composition was adorned. The ornaments were admirably selected, and none but such a master as Perrault could have used so many without overloading the architecture: every part displayed taste. The pedestals were a third of the order in height; the principal arch was 25 feet wide and 50 feet high: the lateral ones were each 15 feet wide. These arches were bounded by a square recess, which produced a noble and regular character: thus every part was well arranged, and the sculpture assisted to produce an unusually good effect. Charles le Brun made a similar model for the same subject, but not so beautiful.

The two former edifices are the noblest ornaments of Paris. At the solicitation of Colbert, Perrault undertook a translation of Vitruvius, and how well he succeeded is known to all. His index is very well arranged, of which

he made a compendium for the use of students, and also published a book on the five orders, after the method of the ancients. He, with many other Frenchmen, has tried to invent a new order of architecture, and produced only a ridiculous Corinthian, with ostrich feathers in the capital. The columns are made to represent trunks of trees.

As the original profession of Perrault was that of medicine, which, however, he only exercised for the poor and his friends, the satirical Despreaux, to revenge himself for Perrault's opinion of his satires, in his last canto of *L'Art Poétique*, celebrated the metamorphosis from physician into architect :—

“ Notre assassin renonce à son art inhumain,
Et de jamais la règle et l'équerre à la main,
Laisant de Galien la science suspecte
De méchant médecin devient bon architecte.”

Perrault was weak enough to hasten to Colbert, demanding satisfaction of the satirist; Colbert asked Despreaux what had induced him to do so. The latter immediately answered, that Perrault had himself established the precept, that it was better to be a builder than a physician. The minister only laughed, and Perrault was taught, that if a satire is false it should only excite our smile, and, if true, an anxiety to correct ourselves, but in no case our anger. The faculty has vindicated his memory by placing his portrait among its most celebrated members.

The observatory of Paris has a character of originality very conformable to its purpose; it is flanked by octangular towers, the windows of which are very high, for the purpose of affording an extensive view of the heavens from the interior. This vast edifice is terminated by a platform. In the interior are large vaulted halls, a staircase of bold construction, a vestibule, with a crypt, meriting the most

attentive examination, as shewing Perrault's knowledge of construction.

When admitted into the Royal Academy of Science, he entirely relinquished the practice of medicine, except among his own family and the poor; and devoted himself to natural philosophy. He published four volumes under the title of "*Essais de Physique*." He also published a collection of machines to raise and remove weights, and for various other purposes, extremely useful to society. He dissected a variety of animals, and died in consequence of having dissected a camel, when in such a state of putrefaction as to produce an illness in all who had assisted at it. It is said that he drew up regulations for the establishment of a school of painting and sculpture, as well as for that of architecture.

ROLAND FREART, DE CHAMBRAY,

COUSIN of M. Desnoyers, the war secretary of state, and superintendant of the buildings under Louis XIII., by whom he was sent twice to Rome; once in 1640, on some affairs of importance, and the other to procure the papal blessing on two crowns of jewels, which their majesties presented to the Madonna di Loretto, in token of their gratitude for the birth of a son, the dauphin, afterwards Louis XIV. M. de Chambray availed himself of these two journeys, with the assistance of his brother M. de Chantelon, and the celebrated M. Poussin, to make a collection of all that was rare and curious in the fine arts of Italy, and laid the foundation of his subsequent excellent treatise, "*Parallèle de l'Architecture Antique avec le Moderne*;" an exceedingly useful work, and which would

be still more so, if he had sufficiently explained the principles which serve as the basis to his parallel, and for want of which the whole work may be said not to rest on sufficient authority. Still more aërial is his Corinthian, composed from an idea of the Temple of Solomon.

When Bernini was in France, the king desired M. de Chambray to work in concert with that architect, who soon discovered the superior acquirements of the Frenchman, and had the liberality to confess the same to the king, observing, that his majesty need not have required him to take so long a journey, for that, in M. de Chambray, he had a master whom he should have felt an honour in following, and that he was not so bold as to make any change in his design for the Louvre. This liberality, like great men, is rarely to be found; they alone can duly appreciate and pay the just tribute to merit; thus rendering themselves still greater. Ignorance feeds on jealousy, and then becomes its victim.

GIOVANNI ANTONIO DE' ROSSI, A ROMAN,

(Born 1616, died 1695,)

A son of Lazzaro de' Rossi, of Brembato, in the Bergamasco. He received the first rudiments of architecture from an obscure master, and, without having learnt drawing, became a good architect, solely from an attentive examination of the sumptuous edifices of Rome. He was, therefore, indebted to the hand of another for the expression of those thoughts which he so nobly conceived. On the Corso at Rome he erected that part of the Palazzo d' Aste, now the Renuccini, the façade of which is generally considered a masterpiece of architecture. The divi-

sion of the windows and stories is correct, and the rustic work produces a good effect; but the ornaments of the windows are clumsy, and the forms of the pediments too whimsical. The side towards the street is distorted by bands of pilasters, buried behind each other; those at the two extremities are meagre, the members of the basement too heavy, the jambs of the door poor, the entablature too massive, and the windows between the corbels appear not to have been the original design of the architect. It is unnecessary to say any thing relative to the entrance, which looks as if leading to a grotto, as the situation, and other circumstances, would not allow of its being otherwise.

The arrangement of the majestic palace built by Rossi, for the prince Altieri at Gesu, is much superior. Magnificence is the pervading character of the edifice, both externally and internally. The division of the stories is stately, and the windows are well disposed. The pediments to those of the third story might have been spared, because neither beautiful nor useful, and are too near the entablature. The two Ionic columns which adorn the door are too slender. The court is a square, with porticoes of pilasters; and the architecture is treated in such a manner, that it may rather be termed slight than magnificent, and consequently not corresponding with the stately exterior. The staircase is grand, and well lighted, but here and there narrowed by pilasters which support the roof; the balustrades appear falling, from being placed at right lines with the inclination of the flights; and the doors of the apartments to the landings are not elegant enough.

The greatest defect in this palace is the principal part being more elevated than that on the Piazza Gesu, forming almost a separate building. In the other wing, towards the Piazzo Venezia, is a large gate, leading to a rectangular court, which communicates immediately with the first. It is certainly to be regretted, that in such an edi-

fice, which may be classed among the finest palaces of Rome, and standing insulated as it does, a greater degree of unity should not have been observed.

De' Rossi also built the Palazzi Astalli and Muti, at the foot of the Campidoglio, the hospital delle Donne, at San Giovanni Laterano, the church of San Pantaleo, the elegant and rich, though defective, chapel of the Monte della Pieta, and the church of the Maddalena, which he, however, left imperfect, and was afterwards so miserably finished by others, with a profusion of fanciful ornaments, both in the exterior and interior. From these, and other buildings elsewhere, De' Rossi amassed 80,000 crowns, part of which he left to the hospital della Consolazione, part to the Sancta Sanctorum, and part for the portioning of young women.

He was disinterested and generous, of which he gave a proof to the painter Baciccio, to whom he sold a house for the same price as he had given for it at an auction, although Baciccio, who was pleased with it, offered him more. His conversation was frank, but mixed with a little hauteur. His style of architecture was grand; he was clever in the distribution of light, in the solidity of his ornaments, and in accommodating his building to its situation, to which, though it might happen to be confined, he was enabled to give the appearance of space.

FILIPPO SANCHEZ,

(Died 1696,)

BUILT in the church of San Francesco, at Guadalaxara, the celebrated Pantheon, or the sepulchral chapel of the illustrious family dell' Infantado. This chapel is elliptical,

and the descent to it is by fifty-five steps; it contains twenty-six urns, placed between eight pilasters, which divide the circumference, and also a small chapel, with four jasper columns. There is a grandeur produced by richness of materials: it is said that it cost two millions of crowns. The latter is said to have been executed by Filippo della Penna.

ALESSANDRO VELASQUEZ,

AN architect and painter. He re-modernised the church of the Monache las Vallecas, at Madrid, ornamenting the inferior part with Ionic pilasters, and placed Corinthian columns to the altars. He also painted it in fresco.

CORRADO RODULF,

A German, and son of a sculptor. Requiring a better master, he fled from the paternal house, went to Paris, thence to Italy, and studied Bernini. With his warm imagination, had he studied Palladio, he would have designed something regular. He then went to Spain, and acquired great credit in Valencia. In the rich cathedral, which is supposed to have been raised on the site of a temple of Esculapius, he erected a façade of three orders; an expedient considered necessary to prevent its being concealed by the large ancient tower of Giovanni Franch; an expedient no way calculated to answer the purpose intended, and nothing can be more absurd than the

façade of a church broken into so many parts. The first order consists of six Corinthian columns, between which are niches, with bad statues; the second of four columns, also Corinthian, with statues in the intercolumniations, the best of which are the work of Rodulf; the third is an attic, likewise Corinthian, with a pediment. The interior of this Gothic cathedral is spoilt by the modern embellishment; —a very general misfortune.

Rodulf was employed in Barcelona by the archduke, afterwards the emperor Charles III.

MATTAI DE' ROSSI, A ROMAN,

(Born 1637, died 1695,)

LEARNED architecture of Marc Antonio, his father, who was a tolerable architect; and having studied geometry and the belles lettres, afterwards went to the school of Bernini, who was more attached to him than to any of his pupils, took him with him to France, and employed him in almost all his principal works. He had the superintendence of a palace, built by Clement IX. at Lamporecchio; as also of the church of the Scolopj, at Monterano. By order of the pope, he published a distinct account of the Vatican cupola, proving the fear of its falling to be perfectly absurd, and that Bernini, in making a niche to each pier only, followed the design of the original architect.

On the death of Bernini, De' Rossi succeeded to the greater part of his employments, and to that of architect of St. Peter's. The sepulchre of Clement X. in the Vatican temple, the façade of Santa Galla, the rustic gate at the back part of the Altieri palace, with the stables,

and the custom-house of Ripa grande, are all the works of De' Rossi. He made a design for the oratory of the father Caravita, but it was not commenced on account of its great expense. He executed a great part of the palace of Monte-Citorio, finishing the staircase, the portico, and the upper apartment. That excellent pope Innocent XII. who so justly appreciated all real merit, highly esteemed this architect, and honoured him with the cross of the order di Cristo.

He was sent for and went into France, to execute some designs of Bernini: he was honoured with the favour of the king, and, among other things, made a model for the palace of the Louvre. A war, however, broke out, and De' Rossi returned to Rome, loaded with honours or presents. For the prince Pamfilj he built the cathedral of Valmontone, of an elliptical form, with a good campanile. Innocent XII. sent him to the marshes, to take an account of the damage occasioned by the overflow of the waters; but on his return to Rome, he was taken with an internal complaint, which terminated his existence, in his fifty-eighth year, to the grief of every one, his courtesy and kindness rendering him generally beloved. He had a good knowledge of architecture, drew well, and united to a ready imagination much correctness of style.

JACQUES LE MERCIER,

BUILT the church de l'Oratoire, in the rue St. Honorè, decorated the gallery and added to the court of the Louvre, erected the façade towards the river of the same palace, the palais royal, and the château and parochial church of Richlieu. In 1629, by order of the cardinal, he

built the college of the Sorbonne, and in 1635, the church of the same name. The façade of this church, towards the college, is treated in a good manner, the buttresses, which resist the pressure of the vaults, are managed with skill, and, though by no means resembling the Gothic, give to the church that sacred character suitable to it. The principal façade is an assemblage of defects; orders of far too delicate proportions, the details not sufficiently studied, the pilasters badly distributed, niches too small for the large statues, the door low, and placed within too high an arch. The cupola is in the taste of that of Val-de-Grâce, but smaller. The cardinal de Richlieu selected the Sorbonne for the place of his sepulture, and the architect consequently gave a sepulchral air to the church. The obscurity, the too sombre style of his architecture, the harshness of the greater part of the members, the multiplicity of the niches, the dark tone of the marbles, the sculptures, the pavement, all convey the idea of a mausoleum, nor is even the humidity wanting. The tomb of the famous cardinal is in white marble; a masterpiece of Girardon. He also built the church of the Annunciation at Tours, commenced that of Saint Roch, at Paris, and the portal of the church at Ruel and Bagnolet.

DON GUARINO GUARINI, A MODENESE,
CLERK OF THE ORDER TEATINI,

(Born 1624, died 1683.)

IF there ever was an architect who carried the extravagancies of Borromini to an excess, it was certainly the father Guarino Guarini. He was learned in philosophy

and mathematics, as his various works testify. They are entitled, "*Placita Philosophica, Euclides Adauctus, Cœlestis Mathematica*," in which he treats on dialling, and the method of measuring buildings. He had also read the best authors on architecture, Vitruvius, Alberti, Palladio, &c. as we learn from his posthumous work, entitled "*Architettura Civile*;" and it is strange that, amidst so much learning, he could have committed such absurdities in architecture. When the stomach is deranged, any food, however wholesome, becomes injurious.

He was architect to the duke of Savoy, and erected a number of buildings at Turin. These are,—1st, The gate of the Po, concave, convex, and disgusting to the sight. 2d, The chapel of the Sudario, of a round form, heavy in its arrangements and ornaments. 3d, The church of San Lorenzo, of the Teatine Fathers, of a square form, a number of arches, covered with a cupola, with a portico both at the front and back. In the whole of this edifice there is not one right line, to which principle the good father appears to have been a declared enemy. 4th, The church of San Filippo Neri, in the same taste, with a most awkward façade, concealed by columns and pilasters. 5th, The palace of the prince Filiberto, of Savoy, of two orders of architecture; the first Doric, containing two ranges of windows; the second Corinthian, containing three: but what kind of orders, windows, and ornaments, let those who have seen them decide. 6th, Two palaces for the princes of Carignano; one at Turin, and the other at Racconigi.

It has been the fate, not only of Turin, but of many other cities, to receive embellishments from the hand of the father Guarini. In Modena, his native place, he built the church of San Vincenzo; at Verona, the tabernacle of San Niccolo; at Vicenza, the church of San Gaetano; at Messina, the church of the Sommaschi; at Paris, that of

Sant' Anna; at Prague, that of Santa Maria d'Ettinga; and, finally, at Lisbon, that of Santa Maria della Divina Provvidenza. In all these edifices, whim, irregularity, and mass, both in the plans, elevation, and ornaments, are the prevailing features.

The church of San Gaetano, in Vicenza, is not, however, really by Guarini, but by the count Frigimelica, a noble of Padua, but who had also a bad taste: it was finished 1730. The church of the monks of Araceli is also by Guarini, and has a most absurd cupola, though well corresponding with the rest of the building, which is as expensive as it is ridiculous. It must have required some courage in Guarini to erect this monstrous production in a Palladian city. But, unfortunately, this is a species of courage in which some artists are by no means deficient. Ignorance, mixed with presumption, conceals from their view every thing but their own transcendent merit. Guarini having read in Vitruvius that the Ionic order is taken from the proportions of a female, loaded it with flowers, gems, and various feminine ornaments.

He maintained, against the opinion of Palladio, the propriety of broken pediments, and adopted every species of defect, however absurd. His windows only afforded half the necessary quantity of light, and were of a most extravagant form; his columns twisted, his pilasters fluted spirally, with all kinds of whimsical inventions.

No one can admire the architecture of Guarini, but must, with us, class him among those amateurs who too frequently have attempted to practise the art.

PIERRE PAUL PUJET,

(Born 1622, died 1694,)

SURNAMED the Michael Angelo of France, being, like him, a painter, sculptor, and architect. Not content with the little learning he could acquire at Marseilles, his native place, from his father, a painter and architect, and from one Romano, a ship-builder, he went when very young to Italy; and after various inconveniences, met at Florence with kindness and attention from the first sculptor of the grand duke; and was still more fortunate at Rome, in his acquaintance with Pietro da Cortona. He surprised this great man by his abilities; but he was now desirous of returning to Marseilles, although only twenty years of age. Here he made a design for the vessel called *La Reine*, and then returned to Italy, to draw the monuments of antiquity, by order of the queen; but the fate of these drawings is unknown to us. On his return to France, he executed a number of pictures, which are in various churches at Aix, and elsewhere. In these, the correctness of the drawing, the strength and elegance of the manner, with the freshness of his colouring, are equally worthy of our admiration; but, in consequence of an illness, Pujet was ordered to relinquish the art.

His two termini, which support the balcony of the Hotel-de-Ville, at Toulon, although his first work in sculpture, received the approbation of Bernini; the *Terra with Janus*, and *Hercules*, which he sculptured at Paris, were still more admired.

At Marseilles, he made a number of projects for the embellishment of the public way, called, in Italy, *il Corso*,

in France, Boulevards ; they were graced with two triumphal arches. His design for a public palace in the same city was also superb ; but it was only projected.

Pujet resided some time at Genoa, where are his two statues of San Sebastiano, and Sant' Ambrogio, in the church of the Carignano ; the group of the Assumption, in the Hotel de' Poveri ; the Madonna, in the private oratory of the Sauli ; the chapel of St. Louis, in the church of the Annunziata ; for which church he made the design, and which was erected at the sole expense of the Signori Lomellini. Notwithstanding the remuneration and generous offers made to him by the Genoese nobility, Pujet returned to France, at the request of Colbert, who valued him for possessing the good opinion of Bernini. He was appointed superintendant over the decoration of vessels, with a stipend of 1200 crowns. He made designs for some sterns of ships, and also for the arsenal, and the public palace at Toulon, but which were not executed : he, however, gained the esteem of all, for his invention of a variety of useful machines. He introduced the use of the crane for ships : he invented a machine for drawing vessels from the basins by means of two men ; whereas it formerly required ten to disembark the cannons and anchors. The royal arms over the public palace of Marseilles, also, do great honour to this artist. But his Milo Crotona is placed on an equality with the Farnese Hercules. This piece of sculpture was removed from Toulon to Versailles. Louis XIV. was present at the opening of the case, and the queen on seeing the statue expressed in the act of cleaving the oak, cried out, " Oh, le pauvre homme !" The group of Andromeda and Perseus is also much admired, as is his Alexander, and bas-reliefs of the Milonese plague.

Pujet was not made for a court, and he retired to Marseilles, and built several churches — those of the Capuchin and of la Charité ; and his small palace, with the

inscription; "Nothing can be attained without labour." He died overcome with fatigue. He was open, sincere, lively, impatient, blunt, and choleric; but a good man.

NICOLAS GOLDMAN,

(Born 1623, died 1665,)

Was born at Breslau, and was author of many valuable works. These are *Elementa Architecturæ Militaris*; on the Use of the Proportional Compasses; *de Stylometris*; on Architecture, and a Description of the Temple of Solomon. He invented the manner of describing the Ionic volute, which he said was taken from Vitruvius, and is more perfect than that of Vignola, both on account of its being geometrical, and of the lintel being drawn with the same precision as the first contour.

FRANÇOIS BLONDEL, A FRENCHMAN,

(Born 1617, died 1686,)

A professor of mathematics and architecture, at the Academie Royale. He accompanied Louis de Lomenie, count of Brienne, to Switzerland, of which journey he gives a Latin narration. He had a considerable military appointment, both in the marines and the regular troops; and having also conducted some negociations at foreign

courts, he arrived to the rank of field-marshal, and counsellor of state. He also had the honour of teaching mathematics to the dauphin. The gates of St. Denis and St. Antoine, at Paris, are his design. The latter is in a most trifling and defective style of architecture; but that of St. Dennis is a triumphal arch—majestic, both for its size and beautiful elevation, as well as for its ornaments and massive entablature. Some insist that the triumphal arches of the Romans must yield to the beauty of this. To these gates he affixed very apposite inscriptions in Latin, being well versed in the belles lettres, of which we have a proof in his “Comparison of Pindar with Horace.” He also made designs for various embellishments in Paris. He was director of the Academy of Architecture, and member of that of the sciences; and has rendered himself famous by his notes to the work on architecture by Savot; his Treatise on Architecture, in three vols. folio; a Course of Mathematics; the History of the Roman Calendar; the Art of Throwing Shells; and the New Method of Fortification.

FRANCESCO PICCHIANI, OF FERRARA,
CALLED PICCHETTI,

(Died 1690,)

A celebrated antiquary, who was sent into Italy by the Marquis del Carpio, viceroy of Naples, in search of antiquities. He settled at Naples, where his father, Bartolommeo, had erected the church del Monte della Misericordia, in a circular form, with seven altars, alluding to the seven works from whence the church derived its name. Francesco built the church and monastery of San

Giovanni della Monache, without the Porta Alba; he rebuilt the church of Santo Agostino, near the mint; that of la Divino Amore; the church and monastery de' Miracoli; remodernised San Gerolamo delle Monache, and rebuilt the Monte de' Poveri, in the Strada di Toledo, near la Nunziatura. His reputation was high, especially for his arrangement of a dock. One Bonaventura Presti, who from a carpenter became a Cistercian monk, wished also to be considered an architect and engineer; and having acquired some consideration by his rebuilding the palace of the Nunziatura, and some other buildings, he managed so well with the viceroy, Don Pietro Antonio d' Arragona, that he was appointed to build the dock. The good friar designed to place it in the situation of the Piazza dell' Arsenale; and although those acquainted with the subject represented to him, that it would be too narrow if so placed, and that the royal palace would also be much inconvenienced from a want of air, in a low and confined situation, filled with vessels and galleys, he still continued obstinate in his original intention. He commenced his undertaking, but in the digging the water flowed in so fast, that the friar, with all his ingenuity, was unable to stop it. The viceroy sent him back to the Cistercians, and employed Picchetti and Carfero, who, by means of wheels, similar to those used in Naples to water the fields, got the water out, and reduced the dock to the form in which we now see it, providing a number of fountains for the convenience of the galleys and royal vessels. Picchetti also executed the beautiful and majestic road leading from the dock to the piazza of the palace, and adorned it with elegant fountains. These, and other works, procured this architect general esteem; as did also his courteous and agreeable manners. His contemporary was Gennaro Sacco, a Neapolitan architect, who, in remodernising the church and monastery of

Monte Oliveto, in his native place, met with extreme difficulties, on account of some chapels and other irregularities in the church, which projected into the cloister. But he was well able to overcome these impediments.

GIAN-GIACOMO MONTI, A BOLOGNESE,

(Died 1692,)

WAS a painter of some merit, and clever in architecture. The church of Santo Agostino, built at Modena, after his design and direction, is much admired. At Bologna, his native place, he erected the beautiful church of Corpus Domini, made the designs for the ornaments of the lateral organs, and for the galleries of the choir of the Basilica San Petronio, and built a magnificent gallery in his own house, which is now Palazzo Monti. But his principal work was the grand portico which led from the Saragossa gate at Bologna to the Monte della Guardia, a distance of two miles and a half, where the sacred image called di San Luca is kept. This great undertaking was commenced in 1674. Il Monti there erected the majestic arch which serves as an entrance to the portico : he was indefatigable in prosecuting the work, but did not live to see it completed.

ANDREA LE NOTRE, A PARISIAN,

(Born 1613, died 1700,)

SUCCEEDED his father in the employ of superintendant of the gardens of the Thuilleries: he travelled through Italy, and became one of the first in the laying out of gardens. This architectural gardening has made more progress in France than in Italy, from whence the French derived it. The French being more disposed to mirth than the Italians, the majestic villas of Rome. Frascati, and Tivoli, to them have too great an air of melancholy. He visited the most boasted villas of Rome and Florence, but condemned them as deficient in good taste:—trifling fountains, small baths, grottoes in rocks, organs, birds, and other bagatelles—nothing noble or grand: the artists of Italy have not known how to take advantage of their beautiful climate. All this is asserted by M. Le Notre in his manuscript; and he says, moreover, that the villas Pamfilj and Lodovisi are his designs.

M. Le Notre lays down a law for gardening, and was the first to use porticoes, labyrinths, grottoes, parterres, and to reduce the trees and plants in those varied and whimsical forms, which are admired in villas. His first attempt was at Vau le Vicomte, for the famous financier Fouquet, the sport of fortune. He then decorated the royal villas, and particularly Versailles, which stands unrivalled in the richness and size of its gardens. These improvements, which at first charmed and delighted, soon, however, became the subject of vexation. When Louis XIV. desired to see the sum total of the expense for Versailles and Marly, he was so astonished at it, that he threw the accounts into the fire, that no memorial might remain of

such an unparalleled profusion. The following may be mentioned as defects: First, The want of beauty in the situation. Gardens never can be really beautiful, if wanting the smiling embellishments of nature, and an enlivening landscape. Now, the situation of Versailles is naturally wild, being a valley surrounded by barren hills and dark forests: — a harsh countenance is rendered still more so by an attempt to adorn it. Second: The methodical regularity which makes us feel that it is artificial, and that the simplicity of nature has been violated. The parterres, the walks, the little woods — every thing is set out according to rule. We like order and harmony; but not at the sacrifice of that beautiful negligence and charming variety which are the characteristics of all the productions of nature. The hand of art must be employed, but must not be visible. Third: The too great extent of level ground produced a want of the variety we require; plains, slopes, valleys, mounds, forming agreeable contrasts, and that degree of the picturesque which gives an air of truth and nature to all around us. Fourth: A great defect in the gardens of Versailles, are those immense masses of verdure, which prevent both the view and a free circulation of air. One always appears to be enclosed within verdant walls. Fifth: The dull hue of the shrubs, the parterres, and the sandy walks, which is unpleasant and tiresome to the eye. There should be various shades of green; and, instead of sand, which gives a barren effect, the walks should be of fine grass. Sixth: Notwithstanding the immense sums expended in conducting the water to Versailles, the fountains are always dry, and the reservoirs half full of dead and foetid water, and only play on days of festival.

The genius of M. Le Notre shone forth, also, in the draining a morass for the purpose of enlarging Versailles. Louis XIV. thought that to dry up these waters would be extremely difficult. “I think it impossible,” replied Le Notre, “and would do exactly the contrary: instead of

persisting in dispersing them, I will unite them and make them flow so as to form a canal : ” and hence was produced that beautiful canal which encloses the garden of Versailles. M. Le Notre was made cavalier de l’Order de St. Michel, and procurator-general of the royal buildings.

This man, who stood alone in his art, had a mind inexhaustible in curious inventions ; and to him only belongs the credit of all the wonders which compose the beauties of the royal palaces, and the delight of France. The gardens of the Thuilleries, the terraces of Saint Germain-en-Laye, the woods of the Trianon, the natural porticoes of Marly, the espaliers of Chantilly, the walks of Meudon, are all his works.

The French regret that, since the death of this celebrated artist, amidst all the improvements in taste, this is the only one that has degenerated. They complain that a ridiculous and contemptible style has been substituted. Twisted walks, miniature groves, &c. are now in fashion. The largest spaces are filled up with small parts, ornamented without grace, dignity, or simplicity ; instead of durable parterres, they have baskets of flowers, which disappear in a few days. Everywhere are to be seen vases of terra cotta, Chinese deformities, and other things of a similar description and of bad sculpture, which clearly evince a love of frivolity. The vexation of the French is doubled by observing, that in England a good taste in gardening is common ;—that in that country, Nature, adorned with modesty, but not embellished, dispenses her ornaments and gifts to render a garden the asylum of retirement and delight.

JULES HARDOUIN MANSART, OR MANSARD,

(Born 1645, died 1708,)

THE son of a sister of François Mansart, whose surname he took from becoming heir to his illustrious uncle. He made an immense fortune under Louis XIV. who declared him his architect, cavalier of St. Michel, and superintendant-general of the royal buildings, arts, and manufactures. Almost all the various stately edifices erected under this pompous monarch were the work of Mansard. But his ability was not certainly equal to the size of the edifices; and however superior he might be to his uncle in fortune, he by no means equalled him in merit. The Chateau de Clugny, near Versailles, built by Louis XIV. for Madame de Montespan, is the first work of any importance by Hardouin Mansart, and is certainly that in which he has given the best proofs of his good taste. The proportions are just, and correctness is observable throughout the whole of the decoration.* The chateau of the Trianon, the gardens and chateau of Marly, are his designs. These gardens were made while Le Notre was in Italy; but this was of no importance, Mansard knowing well how to unite architecture with gardening.

The greatest work by this architect was Versailles. It is seldom that architects have the good fortune to be employed in edifices of so vast a size; and Mansard's abilities were unequal to the task. First, the selection of

* This building was decorated with the Doric order, surmounted by an attic, and to the body of the edifice were attached two wings; the centre was occupied by a large saloon, the entrance to which was by three arches of equal size. It no longer exists, except in a work entitled, "Les Plans, Profils, et Elevations du Chateau de Clugny."

the situation is the most unfortunate :—all around breathes an air of sadness ; the atmosphere is not wholesome, and there is a want of water. This important error possibly does not belong to the architect. In the second place, the taste of the exterior decoration is trifling and full of defects. This palace imposes on the sight at a distance, from the quantity of the buildings and its richness, the roofs being all gilt ; but our admiration diminishes on a nearer approach, and entirely disappears on our arrival at that miserable court called *La Cour de Marbre*.

The part towards the gardens is of a most uninteresting form. It is a square flanked by two long wings, forming an immense façade of trifling architecture, without pavilions ; and when looked at from a distance, has the effect of a long uniform wall. Finally, the interior is full of errors ; the staircase is too far from the entrance, and so concealed, that a guide is requisite to point it out. On ascending these stairs, there is no vestibule, no hall, but two or three little rooms, which conduct, in an angular direction, to an ante-room nearly dark. The apartments are scattered ; there is no regular plan, and sometimes it is necessary to ascend and descend. Of the gardens we have spoken already : thus Versailles has been justly denominated “ a favourite without merit.” But however great and numerous are its defects, it certainly possesses some beauties. Among these the orangery is remarkable : it has Tuscan columns, and is managed in the most magnificent style. The chapel also evinces great knowledge : it is adorned with isolated columns, with bold architraves ; but, in consequence of the confined situation, Mansard could not display all his talent.*

* This palace was not erected by a single architect, it being the work of various periods. Louis XIII., in 1624, having obtained the signory of Versailles for a hunting-seat, erected the first chateau. Louis XIV., in

This architect designed the gallery of the royal palace, the Place de Louis XIV., exact in its symmetry, and rich in its architecture, but it has more the appearance of a court than a square; and La Place de la Victoire is also small, but remarkable for the number of streets which proceed from it. The church of the Annunciation at St. Denis is much admired; the grand maison de St. Cyr, and the cascade of St. Cloud, are also the works of M. Mansard, who finished the famous church of the Invalids, began by Liberal Bruant, and raised the cupola to it, the most beautiful of Paris, and which only yields to that of St. Peter's in size. It is so placed, that when viewed exactly from the centre, the eye enjoys one of the most magnificent spectacles that can be derived from architecture. Moreover, Mansard endeavoured to give a new lustre to the beautiful paintings which adorn the dome. Before his time they were only lighted by windows in the lantern. Mansard made the other openings in the outer dome, which were not seen from the interior, and which effectually admit the light required, and impart additional splendour to the paintings. This vault becoming decayed, the paintings were injured, and M. Constant remedied the inconvenience by an additional vault,

1660, repaired and embellished it with paintings. These improvements were scarcely completed, when he made sufficient additions to enable him to hold his court there; but these not giving satisfaction, were in great measure demolished, and three new bodies of building were then raised, from the designs of Leveau. The ancient chateau thus lost its original character; and as Louis XIV. respected it from its being the residence of his ancestor, he would not permit its demolition, but ordered it to be surrounded with new walls, which are those towards the garden. The whole length is 300 feet, and the height 60. It is one continued line of building, and has, from its want of a sufficient number of breaks or projections, a very monotonous effect. A basement supports an order not sufficiently bold or conspicuous, over which is an attic; and the whole may be said to have no other merit than uniformity.

covering that in which were the paintings. Mansard was too exuberant in ornaments, and was incorrect in the application of the orders; but he was ingenious in composition, and in the form of his cupolas.

ANDREA POZZO,

(Born 1642, died 1709,)

WAS born at Trent, and at twenty-three years of age became a Jesuit. It is related, that while he was in Rome he officiated as cook in the Roman college. Some German cavalier observing his singular abilities in painting, which were unknown to the Jesuitical fathers, immediately took him from the kitchen, and employed him as an artist. This may be true; but it is not very probable that the cautious Jesuits should not be informed of the talents of their brother Pozzo. He, however, proved a painter of some reputation. He worked with the most incredible celerity, and more especially distinguished himself in perspective. He also attempted architecture, holding it as an axiom that a good painter must necessarily be a good architect; but his designs convince us that what he thought an axiom was in fact a paralogism. The altar of St. Ignazio, in the church del Gesu in Rome, is the architecture of the brother Pozzo. It is the richest altar of Rome, or of all Europe; but even were its riches quadruple what they really are, they could not equal its architectural singularity. That of San Luigi Gonzaga, in the church of Sant' Ignazio, is equally sumptuous and equally absurd. We have glanced over the two thick volumes of the "*Prospettiva de' Pittori ed Architetti*," magnificently printed by Pozzo; and we are really astonished at the extent of his

folly : —Pedestals on pedestals, columns on corbels, continual undulations, broken pediments, projections, irregular figures, and, what is still more monstrous, twisted columns like a serpent raising itself erect. In this work there are two designs for the façade of San Giovanni Laterano : one is with Corinthian pilasters, strangely bent and projected ; in the centre is a concave with two large horns or half pediments distorted ; the other is a zigzag, of the most ridiculous form, with the portico also undulated. Whoever wishes to become the reverse of an architect, should study the architecture of Fra Pozzo. He somewhere painted a cupola supported by columns placed on corbels. Architects should close their eyes on seeing such extravagancies.

He died at Vienna, where he had been sent for by the emperor to execute some paintings, and where he remodernised some churches, among which was that of the Casa Professa della Compagnia, those of the Misericordia, of the Riscatto, la Mercede, &c. His character was exemplary, and he was disinterested and modest.

ANTOINE LE PAUTRE,

(Born 1614, died 1691.)

HE printed in folio a work entitled “ *Les Œuvres d’Architecture*,” enriching it with a dissertation by Aviler. He constructed the Pont Neuf at Paris. The church of the Port Royal in the Fauxbourg of Ste Jacques,* the Hotel

* This is the only building engraved in his work which has been executed, with this difference, that it has neither porch nor statues, and that the interior is without sculptures. It is to be presumed that the

de Gevres, Rue Neuve St. Augustin, the wings of the chateau of San Cloud, and the Hotel de Beauvais, Rue St. Antoine, are all built after his designs. His style of architecture is heavy, but accompanied with good taste. He had two brothers, one a sculptor, and the other an engraver.

JEAN MAROT,

A French architect and engraver: he died at the close of this century. He designed the façade of the Feuillantines at Paris, that of the palace di Mortemar; and, with many other French artists, exhibited his designs for the façade of the Louvre, when Bernini was sent for to France for the same purpose. Perrault treated this façade in the grand style; Bernini projected it half gigantic and half dwarfish. Marot was for making it altogether small, with two little orders, one Ionic and one Corinthian, and a number of projections and courts. To this architect we are indebted for the commencement of a work entitled "Architecture Française," containing 260 plates, which was afterwards continued by Jean François Blondel.

AUGUSTIN CHARLES D'AVILER,

(Born 1653, died 1700,)

WAS born at Paris, where his family, originally from Nancy in Lorraine, had settled themselves for some time.

ornaments were omitted to avoid expense. The Ionic order prevails both internally and externally; and the entablature is Corinthian, with modillions, but no dentels.

From his earliest infancy he evinced his inclination for architecture, to which he applied himself with so much ardour, that he passed his examination at the age of twenty, and was so fortunate as to be selected to go to Rome, to study in the academy there established, and which would be much more advantageous to the French nation were it under better regulation. He embarked at Marseilles, together with Desgodetz and the famous antiquary Vaillant. The vessel was taken, and they were all carried as slaves to Algiers.

D'Aviler immediately commenced drawing, though it was probable that the knowledge of his talent might draw on him a longer duration of his confinement, as it would be a pretence for these barbarians demanding a heavier ransom. He made a design for a mosque at Tunis, which was executed in the grand street leading to the suburb of Babaluch. This is thought the best edifice in that country. After sixteen months' slavery he arrived at Rome, where he resided five years, examining with the utmost attention the best buildings, ancient and modern. On his return to France, he placed himself under Hardouin Mansard, who employed him in executing many of his various undertakings; but, notwithstanding this variety of practical occupations, he wrote a commentary on Vignola, from whom he made a new "*Cours d'Architecture*," with a "*Dictionnaire d'Architecture Civile et des Hydrauliques*," which have done him great honour. He also translated and illustrated some books of Scamozzi; but finding that Mansard never gave him an opportunity of producing any of his own inventions, he went to Montpellier, and executed the gate which D'Orbay had designed in the form of a triumphal arch. This gate is called *La Porte du Perou*. It is a grand triumphal arch, without columns or pilasters, and is finished by a Doric entablature of beautiful proportions. It is ornamented by four bas-reliefs, in the form of medallions, executed by that admirable sculptor

M. Bertrand. From the various edifices which he erected at Carcassone, Beziers, Nismes, and Toulouse,* he acquired so much reputation, that a new situation was created for him, that of architect of Languedoc. But scarcely had he taken possession of this advantageous employment, and married a lady of Montpellier, when he died at the age of forty-seven.

The great success of his "Cours d'Architecture" encouraged him to make considerable additions. Whoever is convinced of the insufficiency of the human intellect, will never allow himself to be led away by the most flattering approbation. It follows then, that an author, zealous for his own glory, will examine his productions with the greatest severity, and will become himself their rigid censor. The greater the praises he receives, the less satisfied will he be with his performances. This was the feeling of Aviler; and by the most scrupulous attention he endeavoured to perfect his works, and would have greatly augmented as well as improved them, had not his premature death prevented him.

DOMENICO MARTINELLI, OF LUCCA,

(Born 1650, died 1718.)

His piety led him to the ecclesiastical states; and his taste for architecture and drawing rendered him celebrated. At Rome he was made keeper of the Academy of St. Luke, and public lecturer on perspective and architecture. At Vienna he made a design for the palace of the prince of

* Here he erected the archiepiscopal palace, which is considered one of his best works.

Liechtenstein, and superintended a number of bridges, fortifications, and palaces, in Germany and elsewhere. His character was choleric, intolerant, resolute, and interested in the extreme. His architectural works are magnificent; they shew a judgment in the invention, symmetry in the parts, and taste in the combination of ancient solidity with modern elegance. His drawings are estimable for their beautiful style and fine taste, and were executed in water colours.

ANTOINE DESGODETZ, A PARISIAN,

(Born 1653, died 1728.)

AFTER having suffered slavery in Barbary for sixteen months with d'Aviler, he resided at Rome three years; and there, under the auspices of Colbert, composed his work entitled "*Les Edifices Antiques de Rome*,"* so much admired for the correctness of the admeasurements. On his return to his country he married; was declared royal architect; and in 1719 succeeded M. de la Hire in quality of professor of architecture. He then commenced his

* This work was published at Paris in 1682, at the expense of the government; and the most celebrated engravers of the time, as Le Clerc, P. and J. le Pautre, Chatillon, Guerard, Brebes, Bonnart, De la Boissiere, Tournier, and Marot, were employed. Other editions have at various times appeared, but all equally deficient in the correct drawing of the ornamental parts and detail; and no attempt is made to exhibit the construction, or to restore the buildings. With a desire of supplying these deficiencies, and forming a perfect work on the subject, one that might be classed for correctness with Stuart's "*Antiquities of Athens*," all the ancient buildings most worthy of admiration were remeasured, and republished in English feet and inches, under the title of "*Architectural Antiquities of Rome*," by G. L. Taylor and Edward Cresy, architects, &c.

lectures, and continued them to his death. On his appointment to the academy, he presented to the king a treatise on the orders ; and among his papers were found treatises on architecture, on cupolas, on the cutting of stones, on the manner of building at Paris, and some sketches on the construction of churches and other public edifices. He possessed a good theoretical knowledge in architecture, and was much esteemed by all who knew him for his virtues and good conduct.

CHAPTER V.

OF THE ARCHITECTS OF THE EIGHTEENTH CENTURY.

It is the general opinion that the 18th century did not possess architects in any degree equal to those of the preceding, and that architecture has fallen from the elevated situation to which the talents of those great men had raised her. This may be only one of those common prejudices which lead us to blame what is present and praise what is passed; but if the evil really does exist, we must search the cause, and adopt the necessary remedies. The reason is simply this, modern refinement has so vitiated the taste and enervated the mind, that few are to be found with sufficient energy to pursue those severer studies which alone can form great men. Instead of endeavouring to produce a few compositions of good effect upon paper, let the student in architecture turn his attention to the construction, proportion, and fitness of the parts of those beautiful remnants of antiquity which still remain to us; and every age and country may again have a Palladio, Scamozzi, Vignola, Jones, and Perrault.

At the commencement of this century, two of the most clever architects of Europe were employed by Francis I. king of Prussia, in embellishing that country, which has since so rapidly improved under his successors.

Bott built the beautiful gate of Wesel, made the designs for the castle and arsenal of Berlin, erected the post-house at the angle of the great bridge, and the portico of the castle of Potsdam, so well known by the amateurs of the fine arts. Eosander added the new wing to the castle of Koningsberg, and the court of the mint, which was afterwards taken down.

FERDINANDO GALLI BIBBIENA

(Born 1657, died 1743.)

WAS born at Bologna, whither his father, Gian Maria Galli, had removed from Bibbiena in Tuscany, his native place, to study painting in the school of the Albani; and there being among the students another named Galli, Gian Maria was by way of distinction surnamed Bibbiena, which name was afterwards given to all his posterity. Ferdinando was a painter and architect. Among a variety of buildings at Parma for the duke Ranuccio Farnese, he constructed the delightful villa of Colorno, containing a number of beautiful gardens, and a theatre decorated with exquisite scenes. These works acquired him so great a name, that he was sent for to Barcelona to direct the festival on the occasion of the marriage of Charles VI. When this sovereign became emperor, he went to Vienna and arranged the magnificent festivals on the birth of the archduke, and exhibited some splendid illuminations on the fishponds della Favorita. He was much beloved by the emperor, from whom he received many rich gifts. He returned to his native country in consequence of his sight being injured. He was clever in the arrangement and painting of scenery, with which he supplied all the principal cities of Italy. He published two books on architecture, and made a collection of his designs in perspective and theatrical decorations.

He died blind, and left three sons of equal talents. Guiseppe and Antonio went into the service of the emperor Charles VI. in the same employment as their father. Guiseppe died at Berlin in 1757. The other son Alessandro, also a painter and architect, died in the service of the elector palatine.

FRANCESCO GALLI BIBBIENA,

(Born 1659, died 1739,)

Was, like his brother Ferdinando, a painter and architect of renown, and of an exceedingly inventive genius. He built the riding school of the duke of Mantua, and painted a number of beautiful scenes in various parts of Italy. At Naples he arranged the festival in honour of the arrival of Philip V., who declared him his architect, and offered him every inducement to return with him to Spain, but he refused. He then went to Vienna, and built a large theatre. The emperor Leopold was desirous of retaining him in his service, and offered him 6000 florins a year; but whilst obstinately persisting in the demand of 8000, Leopold died, and the emperor Joseph succeeded, who dismissed him with many valuable marks of his esteem. He was invited to London, but preferred going to Lorraine, where he built a superb theatre, and where he also married. On his return to Italy, the academy of the Philharmonic of Verona wishing to build a magnificent theatre, requested the marquess Scipione Maffei to select the architect most fitted for such a work: the marquess chose Francesco Bibbiena; and Verona has one of the best-arranged theatres in Italy. It has a portico in front, a magnificent flight of steps at each of the four angles, together with halls and convenient corridors. The orchestra is separated from the pit, and the stage is so well disposed, that the actors are never seen before they come upon it. Between the pit and the proscenium are the two doors of entrance, in the fashion of the ancient Roman and Grecian theatres. These doors should never be opposite the audience, but at the side, as the middle of the

stage is the proper situation for the actors; and a door behind them, opening and shutting, would occasion them to turn their backs on the company.

Bibbiena went to Rome, and there erected the theatre of the Aliberti; but it has nothing to recommend it except its size; perhaps because there was not a Maffei to direct its construction. The situation is bad; the entrances and the staircases equally so; the corridors inconvenient, and, what is still worse, the form is inappropriate, the boxes projecting forward, and being circular. Ancient Rome had the most stately and magnificent theatres in the world; but those of the modern city, though numerous, are universally defective both in form and ornament.

Francesco Bibbiena taught geometry, perspective, mechanics, and surveying, in the academy at Bologna.

ANTONIO GALLI BIBBIENA, OF BOLOGNA,

(Born 1700,)

A son of Ferdinand, and also employed in decorating and erecting theatres. He executed various works in Italy, but more in Vienna and Hungary. Returning to Italy after the death of the emperor Charles VI., in 1740, he erected and painted the new theatres of Pistoja and Sienna, and also that of the Pergola at Florence. But his greatest undertaking was the new theatre at Bologna, for which he made a number of designs; and the one chosen excited so much dispute, opposition, and satire, that it was altered greatly to the injury of the fabric. It was begun in 1756, and in 1763 the *Clelia* of Metastasio was represented in it for the first time, set to music by Gluck. This theatre is entirely of stone, and has five orders, each containing twenty-five boxes.

CARLO FONTANA

(Born 1634, died 1714,)

LEFT Bruciato, in the state of Comasco, his native country, and went to Rome, where he studied architecture under Bernini. The following is a catalogue of his principal buildings in Rome :—

The chapel Ginetti at Sant' Andrea della Valle, the first on the left hand on entering.

The Cibo chapel in Madonna del Popolo, which has a perfect wood of columns and Corinthian pilasters at the angles : the altar, however, is elegant, and has a fine cupola.

The cupola, great altar, and ornaments of the Madonna de' Miracoli.

The church of the monks of Santa Marta.

The façade of the church of the Beata Rita, and that of San Marcello on the Corso ; both incorrect, and in very bad taste.

The sepulchre of the queen Christina of Sweden, at St. Peter's.

The Grimani palace in Strada Rosella.

The Bolognetti palace, simple, solid, and graceful ; it would be still better if the windows were more regularly arranged.

The fountain of Santa Maria in Trastevere ; beautiful and simple.

The fountain in the piazza of St. Peter's, which is towards Porta Cavallegieri.

The reparation of the church of Spirito Santo de' Napolitani.

The theatre of Tordinona.

By desire of Innocent XII. his patron, he erected the immense building of San Michele a Ripa, the chapel of Baptism at St. Peter's, and finished Monte Citorio.

By order of Clement XI. he built the granaries at Termini, the portico of Santa Maria in Trastevere, and the basin of the fountain of San Pietro Montorio. The figure is first formed by two parallel right lines, which return to meet a large arch somewhat more than a semicircle. Had these sides been made twice their present length, the basin would have had a much more beautiful effect.

He restored the casino in the Vatican, and collected in it all the models of the building.

The library of Minerva, lighted from the roof, but somewhat awkwardly.

The cupola of the cathedral at Montefiascone.

The palace and villa for the signor Visconte at Frascati.

He sent a model for the cathedral of Fulda; and others to Vienna, for the royal stables and coach-houses.

In the greater part of these works Fontana practised a *legitimate* and correct style.

By order of pope Innocent XI. he wrote a diffuse description of the Basilica Vaticana. In this work the author projected the demolition of that nest of houses which forms a sort of island from Ponte St. Angelo to the piazza of St. Peter's, and shut out the view of that fabric. He proposed to continue two porticoes from the colonnade to San Giacomo Scosciacavalli, similar to those which unite the colonnade to the façade of the church. Between these new porticoes, and over the piazza of San Giacomo Scosciacavalli, rises a species of triumphal arch, with a campanile for a clock; the architecture is conformable to that of the colonnade, and sufficiently low to avoid intercepting the view of the façade and cupola. From this arch to the bridge is a spacious regular piazza, for merchandise of various descriptions. He also laid out lateral streets behind this portico, which streets run regularly round the

temple of St. Peter's, and lead to the walls of the city and to the closed gate, through which is the road to Civitavecchia. By this means the whole space behind St. Peter's would be frequented, and the air become purer. The arrangements and designs are good; but in a period of seventy years no one has been inclined to execute them; though all allow that the most sumptuous edifice in the world should be complete in itself, as well as the buildings around and adjacent to it.

Fontana made a calculation of the whole expense of St. Peter's, from the beginning to the year 1694; which amounted to 46,800,052 crowns, without including models, demolishing of walls, and the campanile of Bernini, (the erecting of which cost more than 100,000 crowns, and its demolition 12,000,) the sacred utensils, the paintings, or machines. Fontana did not make this calculation from the registers, they being incomplete; but by measuring the building, which, according to him, contains 111,122,000 cubit palms. But there is no allowance for the sums uselessly expended.

We now proceed to the cupola, which was the principal subject of Fontana's work. It had been for some time supposed that the cupola was in a dangerous state, and the idea gained credit after Bernini had made the staircases and niches in the four piers. Some cracks were perceived, and it was immediately attributed to his having impaired and opened these piers. The principal architects of that time proved evidently that the internal vacuums had been purposely left by Bramante and Buonaroti, to render them dryer; that Bernini had only appropriated them to a use; that the cracks were not of any moment, and that the whole structure was perfectly secure. Finally, pope Innocent XI. held a solemn council, which was attended by all the great men and first architects from various parts, when it was agreed that the cupola was not injured, or likely to be. To relieve the then present

generation and posterity from anxiety, the pontiff charged Fontana with the description of the Vatican temple. The architect fully performed his duty, and in various parts of his book proves the folly of such fears.

But neither the intentions of this good pontiff, nor the labours of Fontana, have been successful. In 1742, the report of the cupola of St. Peter's being in danger was again renewed. It was so universally received, that the most alarming rumours ensued, and meetings, writings, opinions, and sayings, were eagerly propagated by all parties. Every one could perceive some clefts, both externally and internally in the arches, the drum, and supports of the drum; but when and how these injuries were received, and by what means they were to be repaired, were points on which all seemed to differ. The mathematicians resident at Rome, the two celebrated French friars, Jacquier and Le Seur, and the famous Jesuit Boscovick, maintained that the injuries arose from the defective form of the cupola, which continually impelled it to destruction, the active power greatly exceeding that of the re-active. They concluded that the cracks were of great importance, and that it was therefore immediately requisite to fill them up, strengthen the cupola with bars of iron, ease the weight, &c. &c. The mathematicians of Naples, Intieri, Orlandi, and Martini, were of the same opinion as those of Rome. They argued that the equilibrium being destroyed, and the impetus greater than the resistance, it was impossible for the cupola to subsist any longer.

One Chiaveri, architect to the king of Poland, then entered the lists, and had the courage to propose, in full assembly, the demolition of the cupola with the drum, which he would rebuild entirely, simple, more pointed, and more beautiful, according to a design which was yet in his imagination; and that the expense would be a mere bagatelle, because he intended to use the same materials. Another proposed restoring the cupola to its first

size, and preserving it from further injury by means of a hoop fastened in the interior with ropes, which being wetted, would produce in two minutes a most miraculous effect. Of nineteen various opinions given in writing, the greater part agreed in encircling the cupola with hoops of iron.

At length, the marquess Giovanni Poleni was sent for from Naples; who, after having examined this structure with the greatest attention, pronounced, that although the cupola was not an exact catenarian curve, it certainly was well formed; that it was solid, and that if it ever threatened danger, there was no other reparation but taking it down. This great man paid no attention to the cracks and openings, and demonstrated that they proceeded from two causes, internal and external. The internal causes were, first, the frequent additions to the piers, which might occasion some to sink more than others; but that the whole four were sound and secure. Second, the large arches being exposed to the atmosphere for so many years. Third, the disadvantages under which Michael Angelo laboured when he designed the drum, both on account of his advanced years, and the various opinions of the ignorant and envious, which shackled his genius, and most probably prevented the work from being as perfect as it might have been. Fourth, the great celerity with which the cupola was arched, viz. twenty-two months. Fifth, if the materials are not all of the same quality, carefully worked, or accurately placed, settlements will naturally be produced; and, in buildings of so large a size as St. Peter's, these settlements are not evident for some years. The external causes were the various effects of atmosphere, added to several severe shocks of earthquakes. The excessive overhanging weight of the drum, which so terrified the mathematicians and architects, was not considered of any importance by Poleni: he rather looked at them as proofs of the strength of the cupola, because these projec-

tions not being equal, plainly shewed that they did not arise from the pressure of the cupola, but either from a want of care in the building of the supports, or were left so for the purpose of placing the ornaments on. In the construction of the cupola were placed two iron hoops; one at the commencement of the curve, the other under the first window. The second hoop was found broken in two places, and appeared to have been so some time. Another proof of the solidity of the cupola, because the cracks in it, not corresponding with those of the hoop, it was evidently not broken by the pressure, but from external causes.

Poleni evidently endeavoured to prove that the cupola was perfectly secure, and required no reparation. He, however, advised five circles of iron, which were placed under the direction of Vanvitelli: the first at the plinth of the drum immediately under the column: the second, below the attic of the principal order; the third at the commencement of the vault; the fourth under the middle windows; and the fifth at the end of the ribs, from whence springs the lantern. The whole five being external, well sunk and covered with brick, to prevent rust. The broken hoop was repaired, but the state of the other old one could not be ascertained, it being impossible to discover it; but, determined to be secure, another was placed between the two old ones: so that eight hoops now encircle this cupola. All the openings and cracks were filled up with plates like wedges, fixed in lead and stucco; and the whole was finished in 1747.

It has been supposed that this method of encircling it, instead of improving the cupola, has greatly injured it. The structure must certainly have been shaken by the cutting away the stone, which caused a number of carts to be employed in removing the fragments, and by the hammers necessarily used on those immense hoops, and by the weight of so much iron. To these critics it appears,

that the opinion of Poleni with regard to the soundness of the cupola, the propriety of its figure, and the small importance of the fissures, is at variance with his advice; and that it is therefore impossible to draw a correct conclusion.

Carlo Fontana had two nephews; one of whom, called Girolamo, died young, but erected the façade of the cathedral, and the fountain at Frascati. They are both common productions.

Among his pupils, Carlo Bizzaccheri re-modernised the Negroni palace, and erected that of San Luigi de' Francesci. Neither the one nor the other display much genius. Alessandro Specchi, another of his pupils, built the palace de Carolis, on the Corso, now belonging to the Conti Simonetti; its style is elegant, but there are too many windows: the gate of Ripetta, and the portico of San Paolo, which fell down in a short time, the architect having relied too much on the chains. The cavalier Sebastiano Cipriani da Norcia built the Antonelli palace at Aquila, after the ruinous earthquake of 1703: and Fontana da Accumoli erected the palace of the marquess Quinzi, in the same city.

CHRISTOPHER WREN,

(Born 1632, died 1723,)

OF an ancient family, originally from Binchester, in the county of Durham, was born at East Knoyle, in the county of Wilts; of which place his father, then dean of Windsor, was rector. At an early age he displayed an extraordinary genius for the sciences and mathematics. At thirteen years of age he constructed a new astronomical instrument on the principle of the orrery, and at sixteen he had made discoveries in astronomy, gnomonics, in

staticks, and mechanics.* At twenty-five he was chosen professor of these sciences; and was afterwards elected professor of astronomy in Gresham college, at Oxford, and member of the Royal Society in London. He went to France, for the purpose of making observations in the science of architecture, and wrote down his opinions. After the terrible conflagration which, in 1666, nearly destroyed all London, with property to an enormous amount, Wren designed a plan for the rebuilding of the city. In this design, printed in 1724, we see long, strait, and spacious streets, cutting each other at right angles; the churches, squares, and public buildings, placed in convenient situations; and here and there various porticoes, at which the principal streets terminated. The author laid this plan before parliament, and here disputes arose, some contending that it should be rebuilt on the ancient plan; others, that the new one of Wren should be followed; and again some, that partly the old and partly the new should be adopted. Finally it was rebuilt without design, the old foundations made use of, the proprietors not consenting to give up any part of their ground. London might have arisen from her ashes the finest city in the world; but from individual and selfish motives, she lost the advantage that might have resulted from this calamity. The streets were, however, widened; handsome squares formed, and the houses built of brick, instead of wood, which was originally the material of the greater part. Previous to the fire, London had been visited by a dreadful plague, that had taken off most of the inhabitants. The streets were exceedingly narrow, and the houses badly drained, which might, in a great degree, be the cause of the old city so commonly suffering from its ravages; in conse-

* See Parentalia, pp. 198, 199, for a long list of these inventions. Among others, he suggested a method of finding the variations of pressure in the air, which led to the use of the barometer as a weather-glass.

quence of which some have observed that the fire of 1666 was a happy event.

That cities should have been built irregular, deformed, and inconvenient, may be attributed to the ignorance and barbarism of the times; but it seems a matter of surprise that these defects should continue to be practised in a more enlightened period. Any great city may, in course of half a century, become regular by demolishing whatever has been improperly built, and by building in more convenient places. Thus narrow streets, unwholesome lanes, and darkness, would disappear. The façades of the public edifices, and the noble palaces, would shew themselves amidst beautiful streets and squares, and the citizens would have convenient and wholesome habitations.

It is particularly remarkable that these calamities occurred to London, during a war with Holland; and, when Europe heard of the project of rebuilding the city more solid, more regular, and more majestic, it was considered as a thing almost impossible, from the imagined state of the finances of England. But what was her astonishment when, in three years, she saw London more beautiful, more flourishing, and more powerful than before. A tax upon coals, and, above all, the ardour and zeal of the citizens, were sufficient for this great work — a fine example of the power of man; an example which leaves room to credit all that has been said of the rapid construction of some of the ancient cities in Asia and Egypt.

Wren * made the design for the famous church of

* Milizia having acknowledged his sources of information concerning the works of Sir Christopher Wren to be exceedingly scanty, the account of St Paul's, the parochial, and other edifices, has been compiled from the *Iarentalia*, and various authentic documents. Among these we must not omit to particularise an elegant essay on St. Paul's, read at the architects and antiquaries club, by Mr. Jos. Gwilt, and published in a work entitled "Edifices of London," to which the reader is referred for a more detailed and critical account of our metropolitan church.

St. Paul's, in London, the first stone of which was laid June 21st, 1675, and the last in 1710, by his son. The west front consists of a noble portico of two orders, the lower Corinthian, composed of twelve columns, and the upper Composite, consisting only of eight; all of which are coupled and fluted, and rest on a basement, formed by a double flight of steps. The whole is surmounted by a spacious pediment, the tympanum of which is filled with a bas-relief, the work of Francis Bird, representing the miraculous conversion of St. Paul; and along the other parts of the summit of this front are statues of St. Peter, St. James, and the four Evangelists. In the upper entablature the frieze is taken up by the consoles, which support the cornice. A tower at each extremity, composed of columns, urns, statues, &c., terminated by a pine-apple, gives effect to the whole.

Much as this front has been criticised and condemned for the coupling of the columns, and other departures from the general application of the orders, there are few churches of the past or present day that can vie with it in richness of design; and St. Peter's, with its single order and attic, appearing of much smaller dimensions than it really is, cannot be put in comparison with it.

On the north and south sides of the cathedral, at each end of the principal transept, placed upon a flight of steps, is a large semicircular portico, formed by six Corinthian columns, each 4 feet in diameter, supporting a half dome. The east end, or choir, is terminated semicircularly, and is of beautiful proportions. The whole of the outer walls are decorated by two stories of coupled pilasters, Composite above, and Corinthian below. The intervals between the latter are occupied by large windows, which light the side ailes, and those between the Composite pilasters by ornamented niches: the entire summit is surrounded by a regular balustrade. The whole of this upper order is of no further use than to conceal the flying buttresses,

which are constructed after the manner of a Gothic cathedral, for the purpose of counteracting the thrust of the vaulting of the roof.

The most conspicuous feature of the building is the dome, which rises in great majesty at the junction of the cross. On a circular stylobate are placed thirty-two Corinthian columns, forming a circular peristyle, every fourth intercolumniation being closed with masonry, and ornamented with a niche. Above the entablature of this colonnade, but not resting on it, rises an attic story, with pilasters and windows over the cornice, on which springs the exterior dome, covered with lead, and ribbed at regular intervals. Round the aperture, or summit, is another gallery, and from the centre rises the stone lantern, which is surrounded with Corinthian columns, and crowned by a majestic ball and cross.

Few buildings can produce more grandeur of perspective than St. Paul's, particularly as entered from the western door. The nave and choirs have on each side three arches, the transept one, resting on piers, decorated towards the middle aisle with Corinthian pilasters. The nave is further lengthened by the morning and corresponding chapel at the west end. For the purpose of giving additional height to the arches which separate the side aisles, the architrave and frieze are broken on each pilaster, and the cornice alone continues through the building. Sir Christopher Wren always insisted* that for this he had the ancients on his side. "In the temple of Peace, in the great halls of the baths, and in all the great structures of three aisles, this is done; and for this reason, that in those wide intercolumniations the architrave is not supposed to lie from one great column to another, but from the column to the wall of the aisle, so that the end of it will appear upon the pillar of the inside of the great navis." But it is to be doubted

* *Parentalia*, p. 289.

whether his arrangement in this particular should ever be imitated.

The choir was completed about 1688; on each side is a range of fifteen stalls, independent of the bishop's throne, on the south side. These, although not remarkable for their elegance of design, are most beautifully ornamented with carvings by Grinling Gibbons. The present pulpit was designed by the late Mr. Mylne; the carving of which was by Wyatt and an ingenious Frenchman.

The pavement generally, of the choir as well as the rest of the church, is of black and white marble.

“ The whole ceiling, or vault, consists of twenty-four flat cupolas, cut off semicircularly, with segments to join to the greater arches one way, and which are cut across the other way by elliptical cylinders, to let in the upper lights of the nave.”*

The central area below the dome is octangular, formed by eight massive piers, four of which are 40 feet wide, and the others only 28. These stand upon basements of masonry, 190 feet square, the solid parts of which are more than equal to the vacant spaces. Above the first order of pilasters the difference of the size of the main piers ceases to exist, the smaller arches being ingeniously extended, and made equal to the others;—the span-drills above then form the figure into a circle, where is placed the great cornice, the projection of which constitutes the floor of the whispering gallery. On this commences the interior tambour of the dome, which consists of a high pedestal and cornice, on which is a circle of Composite pilasters, the intervals between which are occupied by twenty-four windows and eight niches, all corresponding with the intercolumniations of the exterior peristyle. The whole of this work inclines forward, so as to form the frustrum of a cone. Above, from a double plinth

* Parentalia, pp. 290, 291.

over the cornice of the pilasters, springs the internal dome, which is two bricks in thickness; but as it rises every 5 feet, it has a course of excellent brick, 18 inches long, banding through the whole thickness. Also in the girdle, of Portland stone, which encircles the low part, and is of considerable thickness, an enormous double chain of iron, strongly linked together at every 10 feet, and weighing 95 cwt. 3 qrs. 23 lbs. was inserted in a channel cut for the purpose, and afterwards filled up with lead.*

“ The concave of this dome was turned upon a centre, which was judged necessary to keep the work even and true, although a cupola might be built without a centre; but this is observable, that the centre was laid without any standards from below to support it, and as it was both centering and scaffolding, it remained for the use of the painters: every story of this scaffolding being circular, and the ends of all the ledgers inserting as so many rings, and truly wrought, it supported itself. This machine was an original of the kind, and will be a useful project for a like work hereafter.”

In the crown of the cupola is a circular opening, through which the light is admitted from the cone and lantern above; these the architect was obliged to raise, to give a greater elevation to the fabric, and to “ please the humour of the age.” This cone,† truly the thought of a master, and the most judicious which the architect could adopt to attain the required elevation, is two bricks in thickness, and banded at different distances by a girdle of stone and four iron chains, and is pierced with three ranges of small elliptical apertures, and eight semicir-

* Parentalia, p. 291.

† This cone very much resembles that of the Baptistery at Pisa, a representation of which was published in 1705, in the “*Theatrum Basilicæ Pisanae*.” Its construction was probably known by our architect previous to that period, and might have suggested the idea for that of St. Paul’s. See note, vol. i. p. 128.

cular-headed windows above; the latter admit the light from the lantern, which is calculated to be of the weight of 700 tons. Between the lower part of the cone and the outer wall, at intervals of about 8 feet, are strong cross wedges, or buttresses of stone, pierced with circles, &c., each of which supports two upright timbers, about twelve inches square, and also give strength to the foot of the cone; for this figure, if prevented from spreading at the base, will sustain almost any weight. Stone corbels project on the outer face of this cone, and form a base for the upright timbers, that are, as well as those above mentioned, framed into the seventy ribs that constitute the timber or outer dome: these ribs are covered with oaken boards, on which is laid the lead. Angular timbers and bands of iron assist in adding strength to this roof, the construction and mechanism of which is contrived with great skill and judgment. It was Sir Christopher Wren's intention to have beautified the interior cupola with mosaic work, instead of having it decorated with painting, as it now is. The spacious vault is divided into eight compartments of "fictitious architecture," which serves as a frame to as many pictures by Sir James Thornhill; the subjects of which are taken from St. Paul's life.

The dimensions of this cathedral, as taken from the Parentalia, are as follow:—Length of the whole, including the porch, 500 feet; breadth of the front, including the turrets, 110 feet; breadth of the three naves 130 feet; outward diameter of the cupola 145 feet; inward diameter of the same 108 feet; outward diameter of the lantern 18 feet; the diameter of the ball 6 feet; height from the ground without to the top of the cross 340 feet; that of the turrets 222 feet; the general depth of the foundations below the surface of the churchyard is 22 feet, and in many places 35 feet; and the total expense is stated at £736,752, independent of the iron railing which surrounds the churchyard, which was cast at Lamberhurst

in Kent, and cost £11,202. The remuneration made to Sir Christopher Wren, for his superintendence of the work, was only £200 per annum.

“ The number and variety of Sir Christopher Wren's other works form such a body of civil architecture, that they appear rather to be the production of a whole century, than of the life and industry of one man, of which no parallel instance can be given.”*

We shall commence with a short notice of the churches which he erected in London, arranged in alphabetical order:—

ALLHALLOWS THE GREAT, Thames Street, has no attempt at decoration on the exterior, which could not have been seen from its very confined situation. An aisle or ambulatory separates the body of the church from the street, and forms a spacious entrance to the interior, which is but little ornamented; a gallery supports the organ, and the altar-piece, of the Corinthian order, is rather of elegant design. A carved screen separates the chancel, and, though consisting of spiral pillars and a circular pediment, is deserving of commendation for its work, which was executed in Hamburgh. The church is 87 feet long, 60 feet wide, and 33 high; steeple 86 feet high.

ALLHALLOWS, Bread Street, exceedingly plain, though there is some little attempt at decoration in the tower. The inside has no ailes, has a flat ceiling, with very heavy decorations; the altar-piece is partly the work of Gibbon; it is 72 feet long, 35 broad, and 30 high; height of the steeple 86 feet.

ALLHALLOWS, Lombard Street. — This church has two entrances, and is large and commodious. The interior has an air of grandeur, although there is little architecture, and it is well lighted, particularly by the windows

* Parentalia, p. 343.

on each side of the grand Composite altar-piece. It has a square plain tower, with open work at the top, 85 feet high. The church is 84 feet long, 52 wide, and 30 high.

ST. ALBAN, Wood Street, is one of the few attempts made by Sir Christopher to imitate our ancient pointed style of architecture. It has a tower 85 feet 6 inches high, with pinnacles above, making a total height of 92 feet. The church is 66 feet long, 59 broad, and 33 high.

ST. ANNE AND AGNES, Aldersgate.—The front is of brick, and without much decoration. The inside is a square of 53 feet, and 35 high, in which are four Corinthian columns with gilt capitals; the entablature very much enriched, as are also the ceilings. The height of the steeple is 84 feet.

ST. ANDREW, Holborn.—This is one of the most finished performances of our architect; the aisles are separated from the nave by Corinthian columns. The ceilings of the aisles are groined, and the great nave is vaulted, and ornamented with pannels, &c. The window at the east end is bold and well arranged, under which is an altar-piece of the Corinthian order. It has a square tower 110 feet high, at the west end, which was cased in 1704. The interior is 105 feet long, 63 broad, and 43 high.

ST. ANDREW WARDROBE, Blackfriars.—It is a plain brick and stone building on the exterior, and has nothing particularly to recommend it in the interior. It is 75 feet long, 59 wide, 38 high, and the steeple 86 feet in height.

ST. ANTHOLIN, Budge Row, has a curious tower of two stories, terminated with a spire 154 feet high, ornamented with port-holes, pannels, crockets, &c., and terminated by a Corinthian capital: it was built by Cartwright, though designed by Sir Christopher:—the interior is 66 feet long, 54 wide, and 44 high.

ST. AUSTIN, Watling Street, has a spire-steeple, with a square tower 145 feet high, adorned with vases, &c. The church is a plain stone building, with a neat interior of the Ionic order, 51 feet long, 45 broad, and 40 feet high.

ST. BARTHOLOMEW, Royal Exchange, contains nothing particularly worthy of notice; it has a square tower, terminated very fantastically, 90 feet high: the church is 78 feet long, 60 wide, and 41 feet high.

ST. BENNET, Gracechurch Street.—The interior is of a pleasing design, with a coved ceiling; there are neither columns or pilasters: it is 60 by 30 feet broad, and 32 high; the steeple 149 feet in height.

ST. BENNET, Paul's Wharf.—The inside is nearly square; the upper part is surrounded with a Corinthian entablature, on which is a plain ceiling: two isolated pillars form a circle on the north side: it is 54 feet by 50, and 36 feet high; the steeple is 118 feet high.

ST. BENNET FINK, Threadneedle Street.—The tower of this church is square, covered with a cupola and spire, 110 feet high, and is handsome. The interior is elliptical, and decorated with six columns of the Composite order, supporting an oval dome, with a lantern in the centre. It is 63 feet long, 48 broad, and 49 feet high.

ST. BRIDE, Fleet Street.—The steeple is exceedingly beautiful, and forms a conspicuous object from the Surrey side of the metropolis. Upon a tower, 60 feet high, is placed a succession of octagons, surmounted by an obelisk or pyramid, making a total height of 226 feet. The construction is exceedingly ingenious, and as a whole, may be classed next to that of Bow church. The exterior of the church is very plain, the interior highly decorated: there are five arches on each side, springing from coupled Doric columns, which separate the ailes; above is a lofty attic, with elliptical windows, over which is an arched ceiling. The interior is 111 feet long, 57 wide, and 41 feet high.

CHRIST CHURCH, Newgate Street, has the Corinthian

order in the interior, and may be ranked among the most beautiful of the metropolis. It has a square tower, crowned with a light and handsome steeple, 153 feet high : it is 114 feet long, 81 broad, and 38 feet high.

ST. CHRISTOPHER-LE-STOCKS, Broad Street Ward, he partly rebuilt, is 60 feet long, 52 wide, and 40 feet high. The height of the steeple is 80 feet.

ST. CLEMENT DANES, Strand, though said to have been partly designed by Edward Pierce : the steeple was built anew in 1682, and is 116 feet high. The length of the church is 96 feet, its breadth 63, and its height 48 feet.

ST. CLEMENT, East Cheap, a substantial structure, but not much decoration either in the interior or exterior : its length is 64 feet, breadth 40, height 34, and that of the steeple, 88 feet.

ST. DIONIS, Fenchurch Street, consisting of a nave and two ailes, formed by Ionic columns. It is 66 feet long, 59 wide, and 34 feet in height. The bell-tower and steeple, is very simple, and 90 feet high.

ST. DUNSTAN'S in the East, near Billingsgate ; he repaired the body of the church, and added the very beautiful spire, 75 feet high. A square Gothic tower supports four ribs, on the junction of which rests a tapering spire ; there is a lightness and elegance about this design that is unrivalled.

ST. EDMUND THE KING, Lombard Street, exceedingly plain, and has the altar to the north : its length is 69 feet, breadth 39, height 33, and that of the steeple 90 feet.

ST. GEORGE, Botolph Lane. The interior is extremely neat, and decorated with columns of the Composite order, formed into a nave and side ailes. It has a handsome vaulted roof ; the length is 54 feet, breadth 36, and the height 36 feet ; height of the steeple 84 feet.

ST. JAMES, Garlick Hill. The west end is well decorated ; the inside simple and grand, and the proportions

very excellent. An Ionic order supports a semicircular ceiling, divided into pannels : the length is 75 feet, breadth 45, height 40 feet, and that of the steeple 90 feet.

ST. JAMES, Westminster. The interior is very beautiful, and of the Corinthian order. The galleries form an entablature to the square pillars below, and support six columns on each side, from the entablature of which springs the centre vault. The altar-piece is decorated by Gibbons. It is 84 feet long, 68 broad, and 42 feet high ; that of the steeple 149 feet. Sir Christopher Wren, in a note to a friend, observes, that this church contains above 2,000 persons ; and that there are neither walls of a second order, nor lanterns, nor buttresses ; but the whole roof rests upon the pillars, as do also the galleries ; and is the cheapest of any form he could invent.

ST. LAWRENCE, Jewry, Guildhall.—The interior highly enriched, and of the Corinthian order, 81 feet long, 68 broad, and 40 feet high ; and the east end, next Guildhall, is decorated with four Corinthian columns, on a continued plinth ; with niches, and festoons of fruit well sculptured : the steeple is 130 feet high.

ST. MAGNUS, London Bridge, has a lofty steeple, consisting of a tower covered with a cupola, surmounted by a well-proportioned spire. The interior is divided into nave and side ailes by columns of the Ionic order. It is 90 feet long, 59 broad, and 41 high.

ST. MARGARET PATTEMS, Rood Lane.—It is 66 feet long, 52 broad, 32 high, and is very plain. The tower and spire are well proportioned and executed, but the pinnacles are a mixture of Gothic and Roman. It is 198 feet high.

ST. MARGARET, Lothbury.—The interior Corinthian columns and pilasters are of good proportion ; and the door to the tower has been much admired. It is 66 feet long, 54 wide, and 36 high. The height of the tower is 140 feet.

ST. MARTIN, Ludgate.—Its interior is nearly square, 66 feet by 57, and 59 high; with four Composite columns supporting a vaulted ceiling to the middle ailes. The effect of the whole may be considered good. In the vestry, an old register contains an entry of a “gratuity of five guineas, to be given to Sir Christopher Wrenn, for his care in promoting the finishing the steeple and spire.” The tower and spire is 168 feet high.

ST. MARY, Abchurch, is nearly square, with a domed ceiling, and springing from a Corinthian cornice. It is 63 feet by 60; the height 51 feet; that of the steeple 140 feet.

ST. MARY, Aldermanbury.—Columns of the Composite order form a nave and two ailes. Its length is 72 feet, breadth 45, height 38. It has a plain square tower 90 feet in height.

ST. MARY, Aldermary, Bow Lane.—A body and two ailes, and a tower 135 feet high.

ST. MARY-LE-BOW, Cheapside.—This beautiful tower and steeple is 225 feet high. The upper part of the square tower has each side decorated with four Ionic pilasters, with a regular entablature: above is a balustrade, at each angle of which is placed a pyramid, leading the eye to a beautiful circular temple of the Corinthian order; the cell of which appears solid, and supports the inverted consoles or buttresses, that bear up a stylobate, with other columns, arranged on a square plan, with two others projecting on each face. Above these is the pyramid or spire, surmounted by a ball and dragon. The length of the church is 65 feet, breadth 63, and height 38.

ST. MARY MAGDALEN, Old Fish Street.—It has a nave and two ailes, and is 60 feet long, 48 wide, and 30 high; it is well proportioned, and lighted by circular-headed windows.

ST. MARY SOMERSET, Thames Street, has a square well-proportioned tower, surmounted by pinnacles 120 feet

high. The interior is 83 feet long, 36 wide, 30 high, and divided into a nave and two aisles.

ST. MARY-AT-HILL, Billingsgate, was restored by Sir Christopher in 1677, in a neat plain style, keeping up part of the old walls and tower; 96 feet long, 60 wide. The height of the steeple 96 feet.

ST. MATTHEW, Friday Street. — A substantial edifice, well constructed, but very simple in its design. It is 60 feet long, 33 broad, 31 high; the steeple 74 feet in height.

ST. MICHAEL, Basinghall Street, is a plain structure, and has a skilfully contrived spire, 75 feet in height. The church is 70 feet long, 50 broad, and 75 high.

ST. MICHAEL, Queenhithe, is 71 feet long, 40 broad, and 39 high; the steeple 135 feet in height.

ST. MICHAEL, Crooked Lane, has a nave and two aisles, with a well-proportioned front. It is 78 feet long, 46 broad, and 32 high. It is well lighted: the tower is of stone, 100 feet high, from the centre of which rises a lofty and well-proportioned spire.

ST. MICHAEL, Cornhill, was destroyed by fire, all but the ancient tower, which, however, was rebuilt with the rest from Wren's designs, 1722. This tower is 130 feet high to the top of the pinnacles: the interior of the church is light and commodious. It is 87 feet long, 60 wide, and 35 high.

ST. MICHAEL ROYAL, College Hill, is a good piece of construction; has a square interior, 86 feet long, 48 wide, and 40 high, without either column or pilasters; with an altar-piece by Gibbon: the steeple is 90 feet in height.

ST. MICHAEL, Wood Street. — Its length is 63 feet, width 42, and height 31. It has a flat ceiling, and nothing architectural but the arrangement of the exterior at the east end, which is a bold composition of four Ionic

pilasters supporting a pediment. Between the pilasters are three semicircular-headed windows : the steeple is 90 feet in height.

ST. MILDRED, Bread Street.—The four sides of the interior are uniform, each having one window under a spacious arch. It is divided into a nave and ailes. Its length is 62 feet, breadth 36, height 40, and to the top of the spire 140.

ST. MILDRED, Poultry, is a small but well-proportioned church ; has a plain tower, surmounted by a cupola. Its interior consists of a nave and two ailes, divided by Ionic columns, with a flat ceiling. Its length is 56 feet, width 42, and height 36 ; that of the steeple 75 feet.

ST. NICHOLAS, Cole Abbey, Old Fish Street.—The tower is in good proportion, but the spire perhaps is a little too whimsical in its design. The total height is 135 feet. The length of the church is 63 feet, breadth 43, height 36.

ST. OLAVE, Jewry, is a plain neat church of brick, with stone decorations to the apertures, and a handsome square stone tower with pinnacles, finished about 1676, and is 88 feet high. The length of the church is 78 feet, breadth 34, and height 36.

ST. PETER, Cornhill, is a commodious edifice, 80 feet long, 47 wide, and 40 high, divided into a lofty nave and two ailes, by a double row of Corinthian columns. It has a lofty tower, surmounted by a well-proportioned spire 140 feet high, with a large key, emblematical of St. Peter's office, as a vane.

ST. SEPULCHRE, Snow Hill, almost destroyed in 1666, was commenced rebuilding in 1670 ; but it may be considered only a restoration. The length is 126 feet, breadth 58, height 35, and that of the tower 140 feet.

ST. STEPHEN, Walbrook, the beauty of which consists in the lightness of its construction. Its internal dimensions are 75 feet by 56 : four ranges of five Corin-

thian columns divide it laterally; the third and fourth columns of the two middle files are omitted, for the purpose of giving space under a beautiful circular dome. The walls and tower are of stone, the roof and dome of timber, covered with lead. The fourth intercolumniation of each outer range is increased to the width of the middle aisle, which is the greatest, and thus produces a regular octangular figure; arches spring over the entablature, above which is a circular cornice, from whence rises the dome. There are but sixteen columns altogether, and certainly they are disposed to the most advantage. The height of the steeple is 70 feet.

ST. SWITHIN, Cannon Street, has nothing worthy of admiration but its construction. It is 61 feet long, 42 wide, and 40 high; the height of the steeple 150.

ST. STEPHEN, Coleman Street, consists of a nave and two aisles. Its length is 75 feet, breadth 35, height 44, and that of the steeple 65.

ST. VEDAST, Foster Lane, Cheapside.—He added the beautiful steeple, 90 feet high. The length of the church is 69 feet, breadth 51, and height 36.

He also erected the College of Physicians, Warwick Lane, London, the theatre at Oxford, Chelsea College, Marlborough House, St. James's, which is a fine specimen of a town residence; part of the palace at Hampton Court; the colonnade and a great portion of Greenwich Hospital; commenced a regal palace at Winchester, which would have rivalled Versailles, if completed; built the library, Trinity College, Cambridge, as well as the chapels at Pembroke and Emanuel Colleges at the same place.

The Monument of London was also designed by him, and is one of the most celebrated works of the moderns, and one of the boldest efforts of architecture. It was erected as a memorial of the dreadful fire of London, which happened September 2, 1666, near the spot where it began. On a pedestal 21 feet square is a fluted Doric

column 15 feet diameter, on the abacus of which is a gallery, and a pedestal supporting a flaming vase of gilt bronze: the whole height from the pavement is 202 feet. The gallery on the top is reached by ascending a flight of 345 black marble steps contrived in the middle of the column, and lighted by occasional loop-holes. On the pedestal are inscriptions and bas-reliefs, descriptive of the burning and rebuilding the city.

The repairs at St. Peter's church, Westminster, were also carried on under his direction; but his knowledge of the pointed style of architecture did not qualify him for the superintendence of this beautiful building, which he has sadly deformed.

Wren was also declared royal architect, created a knight, and appointed one of the commissioners by Charles II. for fixing on a proper spot to erect an observatory; and assisted Sir John Moore, who had the superintendence of that building, with his advice. He was also a member of parliament. He never published any of his works, but many relating to mathematics have been printed by others. He is also said to have discovered the method of injecting liquors into the veins of animals. * His abilities were great, but an excessive timidity prevented him from conciliating the favour of those who could not have failed to have esteemed him. He was more than an Englishman in his taciturnity, and could never comprehend the vanity which induces persons to speak so much of their own performances; nor could he conceal his disgust for such characters when thrown into their society. Modesty is to our virtues what shadow is to a picture; well managed, it serves to throw out the other parts, but if too powerful, darkens what it is intended to relieve. Wren,

* Milizia's character of Sir Christopher is inserted, to shew the estimation in which the English architect was held by the Italians. The account of Hawksmoor is added from Walpole's "Anecdotes," &c.

besides his superior knowledge of the most abstruse sciences, was one of the greatest architects that ever appeared. He was an excellent mechanic, and knew well how to proportion the masses to the void of a building. His ideas were grand, but simple; his ornaments were sometimes tasteful and appropriate, but generally ill executed. He had always in his mind the saying of Montaigne, that not the most learned, but the best learned, should be esteemed. From the treatment he experienced in his latter years, we find that in England, as elsewhere, justice is not always done to real merit.

NICHOLAS HAWKSMOOR.

NICHOLAS HAWKSMOOR, born 1666, and died 1736, was an ingenious and skilful architect, and for many years the domestic clerk of Sir Christopher Wren: he was employed by him in the royal and other works. Hawksmoor erected the beautiful church of St. Mary Woolnoth, on the south side of Lombard Street. After the death of his master he was appointed superintending surveyor to all the new churches; and designed many that were erected after the passing of queen Anne's statute for building fifty. Among others, he erected Christ Church, Spitalfields; St. George, Middlesex; St. Anne's, Limehouse; and St. George's, Bloomsbury. He also built part of All Souls' College, Oxford; a mansion at Easton Neston, Northamptonshire; and assisted Vanbrugh at Blenheim and Castle Howard.

WILLIAM TALMAN.

THE style of this architect's buildings was correct and noble. He made a design for Thoresby House,* for the duke of Kingston, in the county of Nottingham, 1671. In 1681 he gave one for Chatsworth House,† in the county of Derby, for the duke of Devonshire. The quality of the materials, the neatness of the execution, the consistent decorations, and the rich furniture, render this edifice one of the most respectable not only in England, but in all Europe. On the ground plan are the offices, a large hall, and a chapel, and in the centre a spacious court, with two noble porticoes. A most magnificent staircase leads to the first range of state apartments, in which is a superb gallery, and a library of select books, ornamented with excellent pictures. Over this is another suite still more noble. The western façade is in the richest and best style of architecture. On a rustic basement rises an order of Ionic pilasters, and in the centre is a tetrastyle portico, that is of four columns, over which is a rich pediment. The whole edifice is crowned with balustrades, on the solid divisions of which are vases, which have a better

* This is rather a comfortable house than a magnificent seat; the basement is of rusticated stone-work: the principal front has a tetrastyle portico of the Ionic order, of the same material, and the remainder is executed in brick.—See *Vitruvius Britannicus*.

† The form of this building is nearly a square of about 190 feet; the hall is 60 feet by 27, and, though somewhat gloomy, has an air of magnificence. The ceiling was painted by Verrio and La Guerre. The chapel was also decorated by the former. The dining-room is 50 feet by 30; the dancing gallery, 100 feet by 22, is exceedingly beautiful. The state apartments connected with the latter are on the south side of the building.

effect than statues. The windows are simple in their design.

Dynham House, in the county of Gloucester, by Talman also, is exceedingly beautiful. It has a balustrade at top, with ornaments of trophies and vases, in most excellent taste. The windows have elegant mouldings, but are too lofty.*

WILLIAM BRUCE,

ONE of the best British architects, in 1702, built Hopetoun House, Scotland. The ground story contains a portico, hall, and four beautiful apartments. In the centre is an octagonal staircase, which leads to the state rooms. The façade is rusticated, and of fine stone. The windows are well proportioned and arranged; at the top is a balustrade, with vases and statues, and in the centre rises a stone cupola, which covers the staircase. Cupolas are a common feature in the great houses of England; nor is there any reason why they should be confined solely to churches.

They appear indeed peculiarly calculated for noble houses, to give light to the staircases or halls, when these are surrounded by apartments; thus becoming not only useful, but also adding both to the exterior and interior beauty. The belvederes, frequently placed over a house, and which with us are generally made square, would certainly look better if of a round form, and covered with an elegant cupola.

* This architect was born at West Lavington, in Wiltshire.

ARCHER,

AN architect of a most extravagant taste. Cary House, built by him at Rohampton, is incorrect. Cliefden House, Buckinghamshire, is large, and has elegant gardens; but the plan is most whimsical and irregular, and the architecture full of extravagancies. Among them may be mentioned one of the façades, which is adorned on the ground story with Ionic columns, having a niche at each intercolumniation. The number of these niches does not amount to less than twenty-six.*

SIR JOHN VANBRUGH

ERECTED a number of buildings: his taste, however, was not the most excellent. He built the famous Blenheim House, in the county of Oxford, presented by the English nation to the duke of Marlborough, as an acknowledgment of the memorable victory he obtained in 1704, at Hocstet, or Blenheim, over the French. The style of this edifice is grand, the parts noble, and its majestic appearance well adapted to the martial genius of its possessor; but there is too great a variety in the design, and the contrast of the

* In Walpole's *Anecdotes* we find the following notice of this architect:—"A Mr. Archer, a groom porter, built Hethrop and a temple at Wrest, St. Philip's church in Birmingham, Cliefden House, and a house at Roehampton; which, as a specimen of his wretched taste, may be seen in the *Vitruvius Britannicus*; but the chef-d'œuvre of his absurdity was the church of St. John with four belfreys, at Westminster."—*Walpole's Anecdotes*, vol. iv. 4

different orders, rustics, columns, and cornices, too violent. The interior is decorated with a number of paintings by the celebrated Thornhill, the English Raphael.* The gardens are noble; but it is astonishing that a bridge of one arch, 100 feet span, should have been thrown over a small rivulet, which is scarcely visible. Hence a satirist has taken occasion to say, that the height of the bridge is emblematic of the ambition of the duke of Marlborough, and the scarcity of the water of his generosity. The great lord Bolingbroke, when questioned as to the avarice of this celebrated general, replied, "That so numerous were the virtues of the hero, that he did not recollect his defects."

The same architect built Castle Howard for the earl of Carlisle, in the county of York, with gardens, parks, obelisks, and other sumptuous appendages. The castle is 660 feet long. One façade is entirely rustic, with Doric pilasters, badly distributed, and containing two stories. The windows have circular heads, and are too lofty, and the projections numerous and monotonous. The other façade is better, the Corinthian pilasters being equally distributed: there is also a magnificent cupola.

This architect was an agreeable man, and a poet; and

* Vanbrugh sometimes indulged his fancy at the expense of his judgment; and it is said that few architects ever understood the picturesque of building better. In spite of the general objections made to his style being heavy, it has the merit, in this example, of being vast and august rather than ponderous; indeed some have observed, that its massive grandeur was expressive of the talents of the hero for whom it was erected. The whole extent of the front, from wing to wing, is 348 feet. The hall is 67 feet high, and the saloon which is attached to it occupies the entire breadth of the centre of the edifice, and is a most noble and spacious room. The library is 183 feet long, 31 feet 9 inches wide, and forms the western front. Solid columns of veined marble support a rich entablature, over which is a vaulted ceiling. There is a chapel, a theatre, suites of noble apartments, ample staircases, suitable offices, and all in their decoration worthy of such a palace.

it is said that his writings were as delicate and elegant as his buildings were clumsy. Sir John, going a journey to France in 1701, was thrown into the Bastile, and remained there some time, without ever being able to discover the cause for such treatment. He wrote a comedy while in confinement; and it is astonishing that he should have totally abstained from any injurious observation on a country in which he had suffered such violence.*

WYNE,

A learned and ingenious captain, erected, in 1705, Buckingham palace, in the most beautiful part of St. James's Park. The façade is adorned with Corinthian pilasters, having a balustrade decorated with statues. The staircase is noble and elevated. The palace contains a valuable collection of rarities.

FOLEY,

Who had a situation as an auditor, built a superb house for himself, 1710, with beautiful gardens, in the county of Hereford.

* His other buildings were, Eastberry in Dorsetshire, King's Weston near Bristol, Easton-Neston in Northamptonshire, one front of Grimsthorp, Mr. Duncombs in Yorkshire, two little castles at Greenwich, and the Clarendon printing-office, Oxford. He died at Whitehall, March 26th, 1726.

WILLIAM BENSON.

THIS gentleman built a beautiful house, in 1710, after his own design, following the manner and style of Jones.

THE EARL OF PEMBROKE

DESIGNED a bridge, and an elegant Ionic loggia, at his villa at Wilton.*

THE EARL OF NORTHUMBERLAND

BUILT at his villa, a short distance from London, a beautiful house in the Grecian style, with tribunes, chalcidicum,

* "The soul of Inigo Jones, who had been patronised by this nobleman's ancestors, seemed to hover over its favourite Wilton, and to have assisted the muses and arts in the education of this noble person. The villa, which had been decorated by Holbein, Jones, and Vandyke, received its last touches of beauty from the hand of lord Henry. He removed all that obstructed the views to or from his palace, and threw Palladio's theatre bridge over the river. The new lodge in Richmond Park, the countess of Suffolk's house at Marble-hill, Twickenham, the water-house in lord Orford's park at Houghton, are incontestible proofs of lord Pembroke's taste. But it was more than taste; it was passion for the utility and honour of his country that engaged his lordship to promote and assiduously overlook the construction of Westminster bridge, by the ingenious M. Labelye." — *Walpole's Anecdotes*, vol. iv.

and other magnificent appendages, evincing a great taste for the antique. In London this nobleman has a wonderful collection of pictures; among them is the famous Carnara family by Titian, and the most beautiful pictures of Rome, copied by Mengs, Costanzi, Battani, &c.

LORD WESTMORELAND

ERECTED at Mereworth, near Tunbridge, the house called the rotunda, which wants the fine effect of that of Vicenza, only from not being in so elevated and delightful a situation.

THE EARL OF BURLINGTON

PARTICULARLY distinguished himself amidst the English nobility for a correct taste in the fine arts, and especially in architecture. He travelled into Italy, and studied the works of Palladio with great attention, of whose original designs he collected more than sixty, and published a volume on the ancient baths, as was mentioned in the life of Palladio. In 1774 he built a palace at London for general Wade.* The ground story is a superb rustic. Above this is the second story, ornamented with Doric pilasters, and a frieze correctly divided. The windows are simple, with beautiful balustrades; and the whole evinces

* This façade is now in some measure concealed from public view by the New Burlington Hotel in Cork Street, and of which it forms a part.

a certain solidity, nicety, and correctness, most delightful to the eye.

His noble residence at Chiswick* was embellished by him with some of the best specimens of architecture; all so excellent, that each appears the effort of a master. This villa has been published in the English Vitruvius before alluded to, with a number of designs by the author, Campbell, both of churches, palaces, and towns. Among others is one for Westminster Bridge, the whole of rustic work, 770 feet long, and consisting of seven arches, with two small towers at the ends. This artist was so great an admirer of Palladio, that he has imitated him closely in style, and sometimes copied his plans. He also studied the ancients, particularly Vitruvius, after whose rules he made a design for a church: it is extremely beautiful of its kind. Some of his designs, however, abound in liberties and defects, in consequence of his having departed from his two unerring guides, Vitruvius and Palladio.

JAMES GIBBS,

In 1747, built the Radcliff library, Oxford, thus named in consequence of John Radcliff, M.D. leaving a legacy of 40,000*l.* for that purpose. This building is a rotunda, has a rustic basement, with a number of entrances and niches.

* The design of this house is borrowed from a well-known villa of Palladio. It is a model of taste, but not without faults; some of which arise from too strict an adherence to rules and symmetry. Other works designed by lord Burlington are, the Dormitory at Whitehall, the Assembly-room at York, lord Harrington's at Petersham, and the duke of Richmond's at Whitehall.

Over this rises a Corinthian colonnade of coupled columns, having two ranges of windows alternating with niches. Over the entablature runs a beautiful balustrade, the solid divisions of which are adorned with vases, from whence rises an elegant and simple cupola. This exterior is noble and correct; nor can we find any thing censurable in it, except the windows of the second story, which look like large mezzanines, and the useless pediments over the doors. The ability of the architect is equally evident in the convenient arrangements of the ground story, and the decorations of the superior one, where, in a large circular saloon decorated with Ionic pilasters, the books are placed in two ranges. Gibbs published a description of this admirable work, after the examples of the best architects of antiquity,—an example which the moderns should also imitate. He has published a large folio volume of designs of his works, with rules also for designing. He built the beautiful church of St. Martin's in the Fields, London,* the Corinthian hexastyle portico of which, advancing two intercolumniations, is admired for its beautiful proportions. The height of the steeple and spire from the pavement is 185 feet.

* This ingenious architect was born in Aberdeen in 1683, and studied his art in Italy; he also designed St. Bartholomew's Hospital, and a great number of houses for persons of distinction. He made designs for three sides of the quadrangle of King's College, Cambridge, in a modern style. At Derby he added a church in the Tuscan style to a fine rich Gothic steeple. St. Mary's church in the Strand is another of his designs. He built also the new church at Derby; and the senate-house and new building at King's College, Cambridge. He died August 5th, 1754.

ROBERT DE COTTE, A PARISIAN,

(Born 1657, died 1735.)

His grandfather was Fremin de Cotte, who served as engineer in the famous siege of Rochelle, and was also architect to Louis XIII. Robert rendered himself illustrious for the famous peristyle or Ionic colonnade of the palace of Trianon and its adjacent parts, by the chapel of Louis XIII., in the cathedral of Notre Dame at Paris, by the fountain in face of the Palais Royal, the portico of San Roch, that of the Fathers de la Charité, and for a number of palaces, as those of Etrées and du Maine, and also the gallery of Toulouse. The interior of San Roch is full of defects and useless ornaments. He made the plan for the Place de Belle Cour at Lyons, for the bishop's palace at Verdun, for the chateau de Frescati, a superb country palace of the bishop of Metz, for the bishop's palace at Strasburg, and for a number of other considerable edifices. He was director of the royal academy of architecture, and vice-president of that of painting and sculpture. On the death of Hardouine Mansard, he was declared first architect of the king, and superintendant of the royal buildings, gardens, arts, and manufactories. Finally, Louis XIV., who highly esteemed him, and even treated him with familiarity, presented him with the order of St. Michael. This great artist, whose lively imagination was regulated by an excellent judgment, heightened by exquisite taste, and strengthened by incessant labour, composed with ease and originality. These, his rare qualifications, were greatly augmented by the simplicity of his manners, by a modest and obliging exterior, and by an upright and virtuous character. The electors of Bavaria

and Cologne, the count de Hanau, and the bishop of Wurtzbourg were desirous of his designs for palaces. The ornamenting of rooms with looking-glasses was the invention of this architect, and if arranged with more simplicity they would be more elegant.

GIAMBERNARDO FISCHERS, A GERMAN,

(Died 1724,)

DECORATED Vienna with the most magnificent buildings of which that capital can boast; and was honoured and enriched by the generous emperor Joseph I. with the signory of Erlachen. In 1696 he built the palace of Schoenbrunn, as a hunting seat for the imperial court. This edifice consists of a large palace of three stories; that is, the ground story, the state apartments, and the mezzanines. In the front is a large court, surrounded by four bodies of building; two in front of the palace, which are of rustic work, for the use of the courtiers and officers: the other part is of a mixed figure, and consists of coach-houses. In the centre, between these two buildings, is an entrance flanked by two species of triumphal arches, each crowned by a pyramid. The other two lateral buildings are stables, adorned by double pilasters, with an attic above, at the top of which are statues of horses. At each entrance to this court is a fountain, the vase of which is not less than 54 feet in diameter. It would be difficult to define the form of the court; there are a number of breaks, and the palace has at its extremities two wings, behind which are two other smaller ones, and in the centre of the façade is a hanging staircase, of an irregular figure, so that

this large court is cut into narrow and unequal proportions. The palace appears an immense fabric, having thirty-five windows in the front. The whole of the ground floor is rustic : in the centre, over the flight of steps, is a portico of six Ionic columns, isolated and architraved ; there are also Ionic pilasters between every window, and at the wings these pilasters are doubled. Over the entablature is an attic with a balustrade, with statues corresponding to each pilaster ; and in the centre over the attic are five arches, supported by several columns, with balustrades and statues at the top. At the back of the palace are a number of projections and recesses, and spacious and varied gardens. The arrangements, however, are not happy, and want simplicity. The exterior is not well decorated, and the distribution of the interior is bad, nor does it contain that multiplicity of rooms and conveniences that the exterior announces.

On the occasion of the marriage of the emperor Joseph I., the foreign ministers of Vienna, in 1699, caused a triumphal arch to be erected by Fischers, which is a chef-d'œuvre of extravagance. It consists of two masses, one over the other. The lower one is composed of arches, and surrounded on the outside by very high pedestals, with Corinthian columns ; and the two large arches are supported on the inside by four Herculi, standing on isolated pedestals. The upper part, which consists of a cupola, upheld by Corinthian columns, does not rest on the lower one, but on clouds ; and amidst these clouds are a number of statues ; among them an equestrian one of the emperor. The most extravagant disciple of Borromini could not invent any thing more capricious and ridiculous.

The spiral column in the square of Merchandise, at Vienna, similar to that of Trajan or Antoninus, was also designed by Fischers. Whether the sculpture be the work of this architect is not known, but it is certainly not in any degree equal to the models alluded to.

This architect had also the building of the imperial stables, which he executed in a style of simplicity, variety, and magnificence. The building has standing for 600 horses, and accommodations for all the carriages and domestics of the court; there is also a large area for the games or races, and a spacious amphitheatre for the spectators. The chancery of Bohemia, a very magnificent structure, is said to be the design of Giambernardo Fischers.

He also built the palace of the celebrated prince Eugene, in Vienna. It has three ranges of windows in the ground story, of very bad form; and over them rise an Ionic pilastade, which contains the state apartments and the mezzanine. The whole is of rustic work; the entablature is crowned with a balustrade and statues; the ornaments have but little grace; nor is the palace for the prince of Trauthson, built 1711, by the same architect, with so many projections and curves, in any better style.

The sacred edifices designed by our architect are the cupola of Nostra Signora, at Saltzbourg, and the church of Ste. Charles Borromeo, in a suburb of the city of Vienna, near la Favourita. The first is simple, and in good taste. For the bishop and prince of Saltzbourg he made a design for a country palace, neither very ingenious nor very correct.

The church of Ste. Charles Borromeo, erected by the emperor Charles VI., 1716, in consequence of a vow, is a celebrated and magnificent work. The plan may be called a beautiful Greek cross, covered with an elliptical cupola. A convenient flight of steps leads to a simple portico of six Corinthian columns, with a majestic pediment above. Within the portico is a species of anti-temple, adorned with double Ionic columns; near to which are, on each side, two couplets of columns of the same order, but larger than the first, and on high plinths: these are extremely discordant, particularly as they only support a useless entablature, with statues above. At the arms of

the cross are other columns, similar to the latter, which are again repeated opposite to the entrance, that is, at the great altar, at the back of which, the edifice, which is extremely simple, terminates semicircularly. The lower basement of the cupola is adorned with Corinthian pilasters, on very high pedestals, cutting the inferior entablature, and very ill agreeing with the Ionic columns. The entire drum of the cupola has also Corinthian coupled pilasters. Hence, although the plan of the church is ingenious, the arrangement of the orders is bad, and the taste of the ornaments, doors, and windows, equally so. The façade cannot boast of any excellence except the portico; and even on the pediment of that there are statues, which ill agree with it. At the flanks of the portico rise two spiral columns, with clumsy campaniles at the top. By the side of the columns terminating the façade, are two towers for clocks: they are heavy and full of absurdities. In the centre rises the cupola, the projections and fancies of which are numberless.

Our Giambernardo was also author of a curious and useful work, entitled, "Historical Architecture;" full of a variety of designs, accompanied by descriptions. It is divided into five books. The first contains the most renowned ancient edifices, Hebrew, Egyptian, Syrian, Persian, and Greek; the second, those of ancient Rome; the third, some Arabic and Turkish buildings, and some specimens of modern architecture, Persian, Siamese, Chinese, and Japanese; the fourth contains the edifices designed and invented by the author; and the fifth, various vases, Egyptian, Greek, Roman, and modern, and some invented by the author himself.

The above buildings, and others, were not all finished by Giambernardo, but by his son, Emanuel Fischers, who, besides being an architect, was, like his father, well versed in mechanics. His hydraulic machine, in the garden of the prince Schwartzenberg, at Vienna, is well

worthy of attention ; as is also one worked by fire, to draw the waters from the mines Kremnitz and Schemnitz. From these works Emanuel derived great riches, and died 1738.

GILLES-MARIE OPPENORD, A PARISIAN,

(Born 1672, died 1733,)

WAS considered in architecture as a genius of the first rank, and his works were esteemed as excellent examples for young men. The duke of Orleans, regent, a great admirer of talent, gave him the situation of director-general of the buildings and the royal gardens. On his return from Rome, whither he was sent as a student by the king, he was fully employed. The southern façade, the second order of the northern façade, of the church of Ste. Sulpice, the interior decorations at the back of these two façades, and the great altar, are all admirably designed by him. He decorated the gallery of the Palais Royal, the saloon which precedes it, the interior of the house of the grand prior of France, at the Temple, the choir and altar of the church of Ste. Victoire, &c. Oppenord has left a number of designs, more than 2,000 of which are in the possession of M. Huquier, an intelligent artist, and a lover of the fine arts. Part of them he has had engraven with great attention and propriety.

M. DE LA MONCE,

A clever French architect, whose talents were never exerted out of Provence, notwithstanding he pursued his studies in Italy. At Lyons, he constructed the church of the Cistercians, which is considered one of the most beautiful in that city. He also built the façade and part of the collegiate church of Ste. Juste, in a very grand style, and the gate of the Hôtel de Dieu. He also made a beautiful design for the same hospital, afterwards executed by M. Soufflot. Finally, he designed a small gate over the Rodano, in the style of that of Ripetta at Rome.

FRANCOIS ROMAIN,

(Born 1646, died 1737,)

Was born at Ghent, in Flanders, and became a Dominican friar. By order of the states of Holland he assisted in the erection of the bridge at Maëstricht; and was then called to terminate the Pont Royal, at Paris, which it was considered never could be finished. The great success of this work procured him the offices of inspector of the bridges and embankments, and architect of the royal buildings in the department of Paris. He was considered by the court as one of the greatest restorers of his art. He died at Paris, aged eighty-nine.

JEAN BAPTISTE ALEXANDRE LE BLOND,
A PARISIAN,

(Born 1679, died 1719,)

MADE many additions to the “ Cours et Dictionnaire d'Architecture” of Aviler, and these have again been increased by succeeding authors. Hence, by the care of the celebrated M. Marriette, and by a great number of plates by M. Blondel, this work is rendered complete. At Paris M. le Blond has erected a considerable number of buildings; amongst which is the noble palace in the Rue des Enfers, near the Cistercian monastery. The fame of his abilities reached to Muscovy, and Peter the Great, 1716, sent for and appointed him his first architect, and president of all the great works which that prince projected. He, however, died shortly after at Petersburg. The czar ordered his obsequies to be most splendidly performed, and attended them in person.

These are the honours which animate art and science. Piches, honours, and merit, may be obtained by intrigue, and are often possessed by those who neither merit them by their talents nor their virtues; but pledges of esteem are the real tributes to merit, and the strongest incentives that can be offered to a noble mind for its encouragement in the prosecution of all that is great and good.

The last edition of the “ Traité de la Théorie du Jardinage de le Blond,” is enlarged by interesting notes by d'Argenville.

JACQUES GABRIEL, A PARISIAN,

(Born 1667, died 1742,)

A relation and pupil of Hardouin Mansart, and son of Jacques Gabriel, who died in 1686, and was architect of the king, erected the edifice of Choisy, and the Pont Royal, which was finished by the friar Romain. Jacques became an illustrious architect, a knight of the order of St. Michel, inspector-general of the royal edifices and manufactures, and first engineer of the bridges and embankments of the kingdom. He made designs and plans at Nantes and Bourdeaux, for the court of the garrison, and for the clock-tower of Rennes, for the hall and chapel des Etats, at Dijon, and projected the sewer at Paris.

M. Gabriel, son of the latter, the third of that name, and first royal architect, has added to the fame of his ancestors by the building of the military school, which, under his direction, was constructed at Paris, and which surpasses that of the Invalids, from its size and the beauty of the composition. The Place de Louis XV., near the Thuilleries, is his architecture. It is a rectangle, 744 feet long and 522 broad. In the centre is the statue of the king, between two fountains. As this square is in a remote situation, and almost in the country, it is surrounded externally by ditches and parapets, here and there ornamented with trophies. From it proceeds six spacious straight streets. The two large palaces which decorate it in front, are noble, rich, and extensive. Their ground stories consist of rustic porticoes, and serve as a basement to an order of Corinthian columns, which contain the two superior stories. If the basements were not

so high, the order would appear more majestic : the intercolumniations are too wide, the windows not occupying the whole of the space.

These edifices are crowned with balustrades, and have superb pavilions at the angles, which would be better without their inconvenient pediments. Beyond the palaces at the end of the beautiful Rue Royal, is the new church of La Maddelaine, built by M. Contant. The plan is a Latin cross of three naves, with isolated Corinthian columns : its façade is of one order, with a portico also of Corinthian columns ; but the pediment does not look well, from being flanked by balustrades ; and the cupola is heavy in consequence of having four pediments, and the lantern being ornamented in the centre with a balustrade, which projects too much.

FILIPPO IVARA,

(Born 1685, died 1735,)

WAS born at Messina, of an ancient but poor family. He applied himself to drawing and architecture at a very early age. One of his brothers was a worker in silver, and his figures are held in great estimation, particularly in France and England. Filippo took the ecclesiastical habit and went to Rome, without any other object than that of the study of architecture. He entered the school of the cavalier Fontana ; and as a specimen of his abilities, exhibited a design for a palace, according to the ideas which he had acquired in his own country. Fontana told him, that if desirous of being of his school, he must forget all he had hitherto learnt. This architect then desired him to copy the Farnese palace, and other simple edifices, recommending him always to use the greatest

possible simplicity, without fear of falling into the extreme, as he perceived his style too much inclined to extravagance and a redundancy of ornaments.

Ivara paid immediate attention to this advice, and studied assiduously; but his poverty would have reduced him to the last extremity, had not one of his countrymen, named Pelligrini, a clever *méchanic*, and *maître-de-chambre* to the cardinal Ottoboni, introduced him to his eminence, who employed him in his celebrated theatre at Burattini. There are a number of the scenes engraven by Ivara, he having followed that art as a means of procuring his living. The duke of Savoy, since king of Sicily, sent for him to Messina, and entrusted him with the erection of a palace near the gate of the city. The design so much pleased the king, that he declared him his chief architect, with an annual allowance of 600 crowns; and took him to Turin, where he presented him with the rich abbey of Selve, worth 1,100 scudi a year.

By order of Madama Reale, the abbot Don Filippo Ivara erected the façade of the church of the Carmelites, in the Piazza San Carlo, of two orders, with circles, projections, and broken pediments; and after that the superb staircase to the castle, which was out of character with the suite of rooms that it conducted to. Had this been attached to the palace of the king of Sardinia, it would have been better applied. He also erected the temple and buildings on the Superga hill, by desire of the king Vittorio Amedeo. This temple is of a circular plan, and has eight pilasters, almost detached from the wall that forms the inclosure, and in these are set as many columns, supporting a cupola. Through the interpilaster, opposite the principal entrance, is the access to a large octangular chapel, at the extremity of which is the grand altar. The external flight of steps is continued round. The façade has a portico of four Corinthian columns; the centre intercolumniation being larger than the lateral ones. Above

the order is a pediment, which interrupts the balustrade. The cupola, which is of a good figure, is in the centre of two elegant campaniles.

To the royal villa of Veneria, he built the chapel di Corte, which is wonderful both for its invention and beauty, as are also both the coach-houses, the gallery, and the orangery. He erected the church of del Carmine, which is of a singular taste; and gave a superb model to the fathers of the Oratorio for the rebuilding of their church. He made an interior staircase to the palace at Turin. He planned the palace of Stopinigi, for the chace. The hall is whimsical, in it there are eight rooms, arranged in the form of a cross, for the princes; and at the side of the palace, apartments for the knights, the officers of the chace, with spacious stabling, kennels, &c. "In all these designs," says the Marchese Maffei, "invention and genius, judgment and prudence in adapting every thing to its purpose, knowledge and wisdom in not swerving from rules, or from the best ancient documents, are conspicuous." But how few there are who, in their eulogiums, keep clear of exaggeration. Truth in all her simplicity is what we require and seek for, and she obliges us to say, that Ivara was a renowned architect, but certainly not a lover of simplicity, unity, or correctness.

During the winter season, which is unfavourable to building, the abbot Ivara went frequently to Rome, which he so much preferred to every other city that he was desirous of settling there. At this period he made a design and model for the sacristy and deanery of St. Peter's, which is preserved in one of the rooms in that temple, together with four or five others. This model represents a very large and at the same time very magnificent building. The sacristy is of an elliptical figure, but not exempt from many defects. The ground story of the façade of the deanery forms a basement, over which rise Corinthian pilasters, containing two stories; the windows

are ornamented with columns set in the wall, and with mouldings by no means graceful. While Ivara was at Rome, the king of Portugal entreated his Sardinian majesty to send him to his court. It is recorded that while the architect was in the act of making preparations for his journey to Portugal, the provinciale de' Paolotti went to his house, for the design for the staircase of the Trinità de' Monti, which he was commissioned to execute. Ivara said that he had not yet done any thing to it;—that he was not now disposed to do so. The friar became angry, and Ivara, to appease him, desisted from his employment, and standing up, sketched on a card a design in perspective for the staircase; which, had it been executed, it is said would have been an elegant one, and very different from that afterwards erected by Francesco di Sanctis, a Roman architect. He designed and invented with so much expedition, that whilst at a coffee-house he has, with a bad pen, produced such wonderful drawings, that they have been framed and hung up in the galleries of the curious. Whoever wished for drawings were accustomed to urge him for them, and had them immediately; while those who allowed him any length of time seldom received them at all.

He visited Lisbon, where he designed a patriarchal temple; a royal palace, which is considered to be one of the most magnificent ever seen, and various other edifices. He brought from thence jewels, porcelains, a brilliant cross, a pension of three thousand scudi; and was made cavalier di Cristo. Previous to returning to Turin, he made a tour to London and Paris. Immediately on his arrival at his diocese, he was sent for to Mantua to finish the cupola of Sant' Andrea; to Como, that of the cathedral; and to Milan, the façade of the same edifice. There are few private buildings of his executing, although he made arrangements for some both grand and expensive. The palace of the lieutenant-general the count Birago di

Borghe, at Turin, was erected by him, and is considered both beautiful and convenient.

Ivara built the façade of the royal palace at Sant' Ildenfonso, looking towards the gardens. It is ornamented with Composite columns in the centre, and with half columns and pilasters at the sides, with an enriched attic of four cariatides, two medallions, and the royal arms, crowned with trophied balustrades.

This edifice owed its commencement to Philip V., who employed Teodoro Ardemans, grand-master of the royal palace, and of the city of Madrid, who laid the foundation in 1719; the workman being Giovanni Roman. The gardens were under the direction of the engineers Marchan, Solis, and Stefano Botelù; and were adorned with fountains, statues, and other sculpture, by Fermin and Tierri. The addition of a collegiate church was made, which has been recently embellished in the interior, by the marshal Francesco Sabbatini; but the great altar, enriched with marble, remained as it was left by Ardemans; and in 1724, when Philip V. there abdicated the throne, and made this his private residence, he embellished the altar with statues from the collection of Don Livio Odescalchi, son of the queen Christina of Sweden, which were placed there by Dominico Maria Sani. By the side of the great altar, Ferdinand VI. erected a magnificent mausoleum to the memory of his father Philip V. It was designed by Sempronio Subisati, and executed by the sculptors Pitùè and Dumandrè, with a variety of marbles and bronzes. It consists of an urn on a pedestal, flanked by a figure of Charity seated between two children, and one of Grief standing. Upon the urn are two medallions of the kings, and a Fame drawing aside a curtain to discover them with one hand, and holding a trumpet with the other; at the back of the urn is a pyramid, having a vase of perfume on the top, and above that, an escutcheon with royal arms, supported by an angel and a child. In the pedestal is a

crown, on the centre of which is the following inscription : —

PHILIPPO V.
Principi Maximo .
Optimo Parenti
FERDINANDUS VI.
Posuit.

The manufacture of crystal, of steel, and of looking-glasses, established there by Philip V., promises to become equal to the first in Europe.

The queen Elizabeth, pursuing the intentions of her deceased consort, built at Riofrio a pleasure-house, some leagues distance from St. Ildefonso, after the design of Virgilio Ravaglio, architect of the royal palace at Madrid; the form of which he closely followed on a smaller scale, in the first named building, with the exception of the columns and pilasters.

It was continued as far as the plinth by Carlo Freschina, who was succeeded by Pietro Sermini, and he by Giuseppe Diaz-Gamones. This palace, arched by Doric porticoes, with an Ionic gallery above, and a balustrade, with the offices annexed to it, forms a square of 456 feet towards the southern façade, with a gallery of open arches supporting a terrace level with the principal apartment.

After the royal palace at Madrid had been consumed by fire, Philip V. offered Ivara great rewards to rebuild it. He accordingly went to Madrid, but had scarcely finished the design, when a violent fever put a period to his existence at the age of fifty years.

He was cheerful in his disposition, agreeable in conversation, and fond of amusements; but too much inclined to parsimony.

GIAMBATISTA SACCHETTI, OF TURIN,

A disciple and successor of Ivara, in the rebuilding of the royal palace at Madrid. This palace, began by Charles V., and continued by his successors, under the direction of Lewis and Gasparo de Vega, of Giambatista di Toledo, of Giovanni di Herrera, of Francesco and Giovanni de Mora, was consumed by fire, 1734. On this occasion, Ivara displayed one of his most stupendous designs, and also an immense model, which is now preserved in the armoury of the royal palace. According to the idea of Ivara, this seat of royalty was to form a square of 1700 feet on each side. The grand court to be 700 feet long, and 400 feet wide; the others in proportion. The four façades to have thirty-four entrances, eleven of which were to be in the principal one. The whole height to the balustrade, 100 feet. The projections and pavilions of the principal elevation to be ornamented with isolated columns; others of the same description were to embellish the corresponding gallery overlooking the gardens. There were not less than two-thousand columns in this structure, and the statues were still more numerous. The Composite order predominated throughout this ideal edifice; but it was not calculated for the ancient site, where the king wished it to be erected.

Sacchetti adapted one of his own designs to the situation, but in the style of his master; making use of the inequality of the ground to dig out, and form below, all the accommodations and offices necessary for a large court. He placed the principal façade, like the old one, to the south, where it is level; having a ground story, somewhat elevated, then a range of state apartments, and over that another, with mezzanines between each: so that this façade has seven stories of windows, three large, and four small, which

begin from the subterraneous basements, and finish at the entablature under the balustrade. There can be no magnificence in a building divided into so many parts. There is but one entrance to the other three façades, formed on strong walls and vaultings, with a balustrade, interrupted by two flights of steps and two branches at the top, to descend to the north side, where the ground was lower, and where there are also other subterraneous works, with expensive substructions. Thus the southern façade has three stories, besides the four orders of windows in the mezzanines. Those of the east and west have each four; and the north, five stories, with nine orders of windows. The edifice may be convenient, but it is not majestic in its appearance.

Its form is a square of 470 feet in length, and 100 in height to the entablature. There are four projections at the four angles, and another in the centre of the northern façade, which contains the chapel. The ground story is a rustic basement, on which rises a species of order resembling the Ionic, containing three stories; this order consists of half columns, and pilasters on pedestals: in the projections of the angles there are twelve columns, and in the centre of each façade four, except that of the north, in which there are eight. In the intervals are pilasters with Doric capitals.

The whole is of granite, except the ornaments of the windows, which are of white Colmenar stone; over the cornice runs a balustrade, which conceals the leaden roof, and is ornamented with statues of the kings of Spain, from Ataulfo to Ferdinand VI.; but vases have since been substituted. This balustrade is interrupted in the principal front by an attic not peculiarly elegant, crowned with the royal arms. The other façades have similar ornaments, and in the projections are sculptures, alluding to the mythological heroes of Spain.

The windows of the upper story are ornamented with

jambes, and alternating curved and triangular pediments, with projecting heads and mouldings. In the centre of the façades are three arched balconies, with balustrades, and trophies, and lions' heads, supported by corbels. In the body of the principal elevation are some medallions; but too minute for so large a building. The imposts, balconies, columns, pilasters, entablatures, and every projecting member, are also of white Colmenar stone; the rest of polished granite.

This edifice has six principal entrances, one at the eastern façade, with a portico too small to admit a carriage, and a flight of steps called the prince's. The other five are in the principal façade—three in the centre, and two at the wings. The former lead to a spacious portico, and the latter to other smaller ones; but the whole three are so connected, that they form almost one. In the grand portico or vestibule, is the staircase, ornamented with pilasters and columns, which fail of producing their intended effect, from the multiplicity of members and projections. Sacchetti's intention was to have had two principal staircases, one opposite the other; between them a saloon for royal festivals. But considering afterwards that one was sufficient, and that instead of the other he might form a hall, as a more convenient and stately entrance to the apartments, he removed the right hand one. Sabbatini made the staircase more convenient, ornamented it with balustrades on each side, and Composite columns, in the capitals of which are castles, lions, and bands in gold. Over the cornice are medallions of children, representing the four elements.

The court is a square of 140 feet, surrounded by porticoes of nine arches on each side, supported on piers, from whence project pilasters. Above are galleries, enclosed by glass, which lead to the royal apartments, ornamented with Ionic columns, each flanked by smaller Doric ones, which support the impost mouldings of each arch.

Over the cornice of this second order runs a balustrade, like that of the exterior.

This edifice is stupendously solid ; for, notwithstanding the pressure of heavy materials, and of so many vaulted passages and chambers, there is not the least appearance of a settlement. The walls are thick, even to clumsiness.

If this seat of royalty cannot boast of every architectural beauty ; it has the advantage of surpassing every other in the number of its pictures from the hands of the most celebrated painters of Europe. The Spanish monarchs have always offered great rewards, not only for the best productions in the art of painting, but also as inducements to draw to their court the most renowned professors ; among whom, the cavalier Antonio Raffælo Mengs stands gloriously distinguished, and who has left some prodigious monuments of the efforts of his pencil ; a pencil which was always directed by a mind teeming with sublime images, and full of the metaphysical part of his art. He died at Rome, the 27th of June, 1799.

The other ornaments of the interior are in a style of corresponding magnificence ; the variety and beauty of the marbles, the produce of the quarries of Spain, merit particular attention.

The buildings annexed to this royal edifice are all equally magnificent. Opposite the principal front, before which is a grand square, is the armoury and stables ; an edifice which manifests the ability of the architect Gaspara de Vega, who was in the service of Philip II. before Giambatista di Toledo returned from Italy. Its length is nearly equal to that of the palace. The basement is of worked stone, over which rises a brick front, with small rusticated windows, for the convenience of the stables. There are then a series of windows, with cornices and jambs in stone ; and above these, two children in a sitting posture, with a crown between them. The work is finished by a cornice, also in stone. At the eastern extremity is a superb rustic

arch, which forms an entrance to the square. The principal story is appropriated to an armoury, and contains much foreign and ancient armour of great richness, disposed in beautiful order, amidst ornaments of the finest sculpture, and most elaborate carved work. There is shewn the sword of the Cid, and a carriage belonging to the queen Jane, mother of Charles V.

There are also other exterior works in the gardens, well meriting attention. The palace of the Pardo, which was erected by order of Charles V., for Barbara Plomberg, and which was in every respect precisely resembling her habitation in Germany. The exterior works, according to the plan of Sacchetti, and the modifications of Sabbatini, must have been raised at a most amazing expense, on account of the substructions, the difference of level, the porticoes, the vaults necessary in so unequal a soil, the latter almost corresponding in magnificence to the gate of San Vincenza.

FERDINANDO SANFELICE,

(Born 1675,)

A noble Neapolitan of Montagna, and descended from the royal blood of Normandy; who, after having practised painting for his own amusement, entered into the school of the celebrated Solimena, and executed a number of pictures.

During the time of his officiating as one of the electors of the city, Charles II., king of Spain, died, and he was entrusted with the care of raising the scaffold in the Cappella del Tesoro. On this occasion, Sanfelice applied

himself to architecture, and made some very fine designs, both for the obsequies of the deceased monarch, and for the festive decorations on the arrival of Philip V.; and became famous for a number of fanciful staircases, which he erected in various palaces of Naples. He gave a design for the church of the Jesuits; the Nunziatella, over Pizzo Falcone, and that of Santa Maria, in the Borgo delle Vergini. He improved the cupola of the monks of Donna Alvina, by placing pilasters externally, and taking away the lantern. He new roofed the monastery of Regina Cœli, modernised the façade of the church, and rebuilt half the campanile, from the foundation upwards, leaving the upper part, which was in good condition, untouched. The flight of steps before the church of San Giovanni, at Carbonara, the sepulchre of the renowned Gaetano Argento, in the same church, are of his architecture; as is also the library of the convent, in the form of a star, over a bastion of the city. Over Pizzo Falcone, he built the Serra palace; the staircase is considered the most magnificent in Naples. He enlarged the Monteleone palace, and ornamented the great gate in a rather too whimsical a style. The capital of the column is formed by a sculptured head; the ears, which are those of a satyr, represent the volutes, the hair the roses, and the beard the leaves. He built three palaces for his family; one in the Borgo delle Vergini, another without the gate of Constantinople, and one near the Seggio di Montagna; and erected the façade of the church of San Lorenzo.

On the arrival of the king, Charles of Bourbon, of Spain, and on the occasion of his nuptials, Sanfelice was appointed director of the festivals. He was the first who gave an elegant arrangement for a fair, which was kept in the summer before the royal palace, and latterly at Chiaja. He also designed the enclosure for the fairs, which was constructed at the Ponte della Maddelena. The designs he executed were numerous, both in the capital and in

various countries of the kingdom. It is said that the satirist Capasso, on seeing one of the palaces built by Sanfelice, observed, that it merited this inscription: "take care, lest I fall." Whether this want of solidity was really evident in the architecture of Sanfelice, or whether it was only imagined by the bitter Capasso, we will not decide.

ALESSANDRO GALILEI, A FLÓRENTINE,

(Born 1691, died 1737.)

It does not appear that he was of the noble family of Galileo Galilei, the pride of Italy and the sciences, since he encountered much opposition in being admitted among the nobility of Florence. After residing seven years in England, whither he had accompanied some foreign noblemen, he was by the grand dukes Cosmo III. and Giovanni Gastone, declared superintendent of the royal buildings of Tuscany. But he executed nothing very remarkable, either in Tuscany or England. His abilities were manifested at Rome, to which city he went by order of pope Clement XII., and there erected three superb monuments of art; the façade of San Giovanni de' Fiorentini; that of San Giovanni Laterano, and the Corsini chapel, in the latter basilica.

It has been already said elsewhere, that the model made by Michel Angelo for the national church of San Giovanni de' Fiorentini, and which existed within the memory of persons now living, has been lost. It was therefore proposed to adopt the one intended by that great man for the façade of San Lorenzo di Firenze, which also remained unexecuted, and which it was considered would exactly

suit the building in question. This opinion was however rejected, under the idea that the architecture of the present day must be superior to that in the time of Michel Angelo; and Galilei was commissioned to build the present façade. It is certainly grand, rich, and as a whole, beautiful; but it has two orders of Corinthian columns; the niches appear small, the projections of the entablature of the first order have a bad effect, and the high plinths under the columns are useless.

The façade of San Giovanni Laterano, in which Galilei had a wide field for the exercise of his abilities, is certainly by no means a fortunate effort. It has two porticoes, one over the other, united by means of Composite columns, some double, others not; and which, being placed on high pedestals, and interrupting the whole course of the fasciæ and cornices, separate one story from the other. By the side of these large columns, both above and below, are also smaller ones, which have a most disagreeable effect. The finishing is still worse. A group of pyramidical pedestals is raised on a triangular pediment, and on these pedestals stand exceedingly heavy statues. The interior of the portico, however, is not contemptible, although the pilasters are unequally distributed, and the doors of different sizes, causing a break in the cornices: the ornaments are elegant throughout, and the lofty vault is stately in its effect.

The Corsini chapel does great honour to this architect, and is worthy of the piety and munificence of the family who have so richly endowed it. The ornaments cannot be more light or more gracefully disposed. The only exceptionable points are the following: the basement on which are placed the orders, being too high; the projecting angles having two separate pilasters, instead of one; and the great elevation of the cupola. To the altar, and to the two larger niches, are also pedestals upon pedestals, to support the columns of porphyry and alabaster: this is a capital defect; however, the great value of the marble

composing these columns, though they are not sufficiently large to require the plinths and pedestals, is certainly an excuse for the architect.

From the consideration of these three edifices, it may be concluded, that if Galilei was not ingenious in the arrangements of his orders, he succeeded admirably in the ornamental part. He also understood mathematics, and possessed many other valuable acquirements.

DOMENICO ANTONIO VACCARO,

A NEAPOLITAN,

(Born 1680,)

WAS, like his father, a painter, sculptor, and architect. From his youth, he was placed to the study of the belles lettres; and his father, observing that instead of reading books pernicious to youth, he always sought opportunities to use his pencil, gave full liberty to his inclination. He built the church of the monastery of the Concezione, called di Monte Calvario: its form was nearly circular, interrupted by four arches, supporting four tribunes, for the monks. He constructed the Teatro Nuovo in a very confined situation; modernised the church of the Monte Vergine, near that of Gesù Vecchio; and built that of San Michele Arcangelo, without the gate of Spirito Santo. He designed a number of other buildings in Naples, and other parts of the kingdom, as the Tarsia palace, the little palace of Caravita, at Portici; the church of San Giovanni at Capua; and remodernised the cathedral at Bari, which was originally Gothic.

ANTONIO CANNEVARI, A ROMAN,

(Born 1681.)

AFTER having built the church delle Stimmate, at Rome, which is in a very ordinary style, and full of defects, modernised that of San Giovanni and Paolo, and made some designs for the façade of San Giovanni Laterano, and for the deanery of St. Peter's, which were not executed. He then went into Portugal, where he was still more unsuccessful ; for being commissioned to erect an aqueduct, he so little understood the requisite arrangements, that the water never flowed through it. The unfortunate Cannevari overwhelmed with shame, retired from Portugal, and settled at Naples, where he built the royal palace at Portici, and the seat of Porta Nuova, near San Guiseppe. In neither of these edifices did he produce any thing worth notice. He was, however, an upright man ; and died at Naples, at a very advanced age.

NICCOLO SALVI, A ROMAN,

(Born 1699, died 1751,)

STUDIED the belles lettres, was admitted to all the academies of poetry in Rome, applied himself also to philosophy, and to some part of mathematics, and had a slight knowledge of physic and anatomy ; but his strongest inclination was towards architecture, which he learnt from

Antonio Cannevari, who made him study Vitruvius, and the best models, both ancient and modern. Salvi's first effort was on the occasion of some fire-works in the Piazza de Spagna, over the Barcaccia fountain, for which he raised a machine, without making any excavation in the earth, 190 feet high, representing the Temple of Glory, with four façades, not painted, but of architecture in relief. When Cannevari was called to Portugal in the service of king John V., the whole of his employments in Rome were entrusted to the care of his pupil Salvi. He rebuilt the baptistery of San Paolo without the walls; erected the great altar of San Eustachio, the little church of Villa Bolognetti without the Porta Pia, the altar of San Nicola in San Lorenzo, e Damaso; made a design for the great altar of San Pantaleo, which was not executed; the rich pix for Monte Cassino, and the church of Santa Maria di Gradi, for the Dominicans of Viterbo.

His most stupendous work was the fountain of Trevi. Pope Clement XII. was desirous of embellishing Rome with an ornament worthy of the city; but he had not the courage to place it in the most advantageous situation; and unfortunately, that selected has never been improved to the present day, which might have been done by removing the buildings, and converting it into a regular and elegant square. The Ocean is represented by a gigantic figure standing on a shell, drawn by two marine horses, guided by Tritons. These are in the midst of an immense mass of rock, from whence the water flows in various ways. In the centre is a beautiful niche with Ionic columns, from which niche the principal figure appears to issue. On each side are two Corinthian columns, which contain two stories; and between the intercolumniations are two statues and bas-reliefs. Over the entablature are four statues, plumb with the four columns. Above, there is an attic with the arms of pope Corsini, and a balustrade at the sides; and receding a little on each side are four

Corinthian columns, containing two orders of windows ; and over the entablature is an attic, lower than that of the centre, with small windows, between which are festoons. This fountain is superb, magnificent, and rich, and may justly be considered as the best work produced at Rome during this century. The learned, however, discover many defects.

1st. That the water, which is the principal object of a fountain, instead of being conspicuous, is too much divided into small streams which issue from the cavities of the rocks ; so that there is not one point from whence it may be seen in full majesty : and this objection has been still further increased by some marble tazzas lately placed in the centre, from which the water falls with a gentle murmuring noise. 2d. The rocks resemble an enormous collection of stones, heaped one on the other, and occupying too much space. 3d. That there is extreme inconsistency in having a rough basement of rock to support so slight and elegant an order as the Corinthian. 4th. That the niche adorned with Ionic columns and other embellishments in the soffite, is by no means proper to contain Oceanus. 5th. The Ionic columns of the niche are, in comparison with the Corinthian, like dwarfs by the side of giants. 6th. That the Corinthian columns perform no positive office. 7th. That the half pilasters proceeding from their sides, produce a confusion of capitals. 8th. The upper Corinthian ornaments have dentils like the Ionic. 9th. The cornice to the impost of the soffite of the niche runs through the façade, and is cut by the Corinthian columns and pilasters. 10th. The windows, with all their balustrades, are suspended without any support. 11th. The upper windows are higher than the Corinthian capitals, and consequently cut the architrave and frieze of the order. 12th. That the pediments to the windows of the first story are very proper ; but those attached to the windows immediately under the entabla-

ture appear of no use : with a variety of other objections, too numerous to mention.

Salvi made four other designs for this fountain, all in the same style, but less magnificent than that executed. This work was, for thirteen years, a continual source of vexation to the architect. It brought upon him the envy of the whole profession ; and the building was continually interrupted from some trifling cause or other : and in order to complete it, he refused the invitation of the court of Turin to continue the works left unfinished by the death of Ivara. He also declined making a design for the façade of the cathedral at Milan, and the superintendence of the royal building of the Caserta, and that of the Reclitorio. Instead of the advantages he would have derived from these offers, the offices he had to fulfil produced him only misfortunes ; and being constantly obliged to enter the aqueducts of the Acqua Virgine, so weakened a constitution naturally delicate, that he became paralytic, and lived for five years disabled and wretched ; at the end of which period he died, aged fifty-two years.

Salvi sent a design to Augustus II., king of Poland, for a theatre in the style of the ancients, with halls and convenient apartments, not only for the use of the theatre, but also for games, music, and dancing. He also made three designs for the façade of San Giovanni Laterano, all of three orders, with porticoes ; but that of Galilei was executed. Towards the close of his illness, when unable to use his hands, one of his pupils, under his direction, drew three designs for the façade of the Santi Apostoli at Rome ; two of one order, and one of two orders of architecture.

Salvi was sincere, correct in his conduct, and of a reflective though lively disposition. The style of his architecture is slender and elegant, and somewhat simple ; but not exempt from defects. Among his pupils was the Signor Giansimone, architect of Rome.

GERMAIN DE BOFFRAND

(Born 1667, died 1754,)

WAS born at Nantes, and studied architecture at Paris under Hardouin Mansard, who entrusted to him his most important works. In 1709, he was admitted into the Academy of Architecture, and acquired great reputation in Germany, where he erected edifices for a number of the princes.

For Maximilian, elector of Bavaria, Boffrand built a hunting seat near the village of Bouchefort, not far from Brussels. It consists of a circular court, of 50 toises in diameter, in the centre of which is an octagon pavilion, with four porticoes of marble Ionic columns, terminated by pediments ornamented with subjects alluding to the chase. Four vestibules or halls lead to a saloon in the centre, of ten toises in diameter, and of two stories, covered by a cupola; which, together with sixteen windows, light the hall and galleries, communicating to a number of apartments on the first and second story. From the centre of the court are a number of roads leading to the forest, where a lantern was also to have been erected. Part of the attendants are lodged on a terrace; and on the outskirts of the wood are a variety of buildings for offices, &c. The idea is excellent, but it was never completed.

Boffrand was declared first architect of Leopold I., duke of Lorraine, for whom he built the new palace of Nancy, that of Luneville, and another as a pleasure-house, called Malgrange, near to Nancy. This latter edifice is 54 toises in front and 28 in depth, with a vestibule of six isolated Composite columns. Our architect made also a second design for this house, and in a very singular style.

The ground floor consisted of a hall of 10 feet in diameter, with twelve windows, surrounded by a gallery, and supported by twenty-four Ionic columns, twenty-two of marble, and two of bronze, intended for stoves, which, by means of fires under the floor, were to warm the whole palace. In the centre of the hall were four apartments, in a diagonal direction. Between these, on one side, was a staircase to the upper story, which contained the same number of apartments, united by a gallery. On the opposite side of the staircase, was a magnificent dining-room, leading to a peristyle of six columns: the exterior decoration was an Ionic order, 30 feet high, flanked at the four angles by pavilions; but this was never executed.

At Paris, M. de Boffrand built l'Hotel de Montmorency, the court of which is elliptical, and all the rooms regular: the façade consists of Composite pilasters, containing two stories. He also built that of Argenson; the gates to that of Villars and the Luxembourg; and the second order of the façade of the church de la Merci, the first story of which has oval Corinthian columns, terminated by some beautiful heads. But the work from which M. de Boffrand derived the most glory, is the hospital of the Enfants Trouvés, built in a simple and noble style. He also erected a palace at Nancy for the prince of Craon, the centre of which is decorated by seven Corinthian pilasters, with an entablature crowned by a balustrade enriched with vases. At Wurtzbourg, he built the episcopal palace designed by Neuman, a celebrated German architect; a vast edifice, 100 toises long and 50 wide, with a large court of entrance and a double body of building between the court and the garden, two wings over the court, and two others which form lateral fronts. The court is separated from a large square by a railing. The decoration of the ground floor consists of Doric columns and pilasters; the first floor is Ionic, and the second Corinthian. A large square cupola towers in the centre of the edifice, accompanied by four

other lesser ones, which break the monotony, and give variety to the various bodies of this long façade. This would be one of the most stately palaces in Germany if properly completed.

The external and internal decorations of the Hotel de Soubise at Paris, were also by M. de Boffrand. He constructed the ingenious well at Bicetre, 168 feet deep and 16 wide. Whoever is desirous of being acquainted with the structure and the machinery for drawing the water, may be gratified by the perusal of his folio work, written in French and good Latin. He was likewise engineer and inspector of the bridges, embankments, and canals of France. Among others, he built that of Sens, of stone, and that of Monteraufaut-Yonne, of wood. He also published an account of the method practised in casting the equestrian statue of Louis XIV. in one piece; which afterwards served as a guide for that of Louis XV. at Bordeaux.

M. de Boffrand was never in Italy, but always practised the style of Palladio: his greatest talent consisted in arrangement. His mind was noble and disinterested, and his manners gentle and agreeable. He was, in truth, an artist of great merit.

THOMAS GERMAIN

(Born at Paris 1673, died 1748.)

WENT to Italy for the purpose of enriching his mind by the study of those masterpieces with which that country abounds. At Leghorn he made a design for the erection of a church. At Paris he constructed the church of Saint

Louis du Louvre; the style is good, but there are too many projections. He was considered a clever architect, and maintained that reputation till his death.

MARCHESE GIROLAMO TEODOLI,

(Born 1677, died 1766,)

OF a noble Roman family, was well versed in the belles lettres and the sciences. Architecture was his favourite study; and by attention to the best books, he became, without any other master, both a practical and theoretical architect. Being desirous of having pupils, he selected young men of the best capacities, whom he instructed with the greatest possible kindness; and, among others, particularly succeeded with Giuseppe Subleiras, who exercised his profession at Rome with great purity of taste and integrity. His theory was good, and his manner of teaching excellent; but when he afterwards attempted practice, he sometimes departed from simplicity, adopting mixed and affected forms, and heavy harsh ornaments. He also often fell into the spirit of contradiction; thus his pupils were accustomed to blame whatever they wished him to approve.

In Rome he erected the church of San Pietro and Marcellino, of very tolerable architecture. The façade is an order of Ionic pilasters; it has many useless projections, and a window in the centre exceedingly ill arranged. The internal plan is a beautiful Greek cross, covered in the centre with an elegant cupola, entirely surrounded on the exterior with steps. The Ionic order prevails within it, consisting of pilasters on a basement, somewhat too high,

with the usual train of defects—pilasters bent round the angles, half pilasters flanking others, useless cornices, odious projections, offensive pediments, and altars in bad taste.

The figure of the theatre of Argentina is good, though neither circular nor elliptical, as it should more properly have been, but in the shape of a horse-shoe, which, towards the pit, forms nearly two right sides. This theatre is sufficiently large; but is unfortunate in its situation; and the entrances, staircases, and passages, are too narrow. The Marchese Teodoli assisted with the greatest assiduity in the building of this theatre; and there is not the least appearance of probability in the idea of Frediani being the real author of the design, and Teodoli having usurped the honour of it. He was estimable as a nobleman, and an intelligent architect, incapable of profiting by the labours of another, and perfectly capable of better things than the theatre in question.

The church of Vicovaro, and the Casa della Madonna de' Miracoli, on the Corso at Rome, are his designs.

He was in every respect one of the most honourable of men; humane in the extreme, and his mind was enriched by integrity and learning. He was opulent, and unmarried, passing his time in agreeable studies and accomplished conversation, thus rendering himself useful to his country, by setting an example to all the nobility.

GIULIO AURELIO MEISSONIER

(Born at Turin, 1695, died at Paris, 1750,)

Was a painter, sculptor, architect, and goldsmith. Had he confined himself to the latter art only, he would have

become excellent, and not have rendered architecture contemptible. His design for the façade of the church of Ste. Sulpice at Paris, is ridiculous in the extreme.

NICCOLA SERVANDONI, A FLORENTINE,

(Born 1695, died 1766,)

At an early age devoted himself to drawing; and his pictures of ruins and landscapes are much esteemed. He studied architecture at Rome, and particularly the ancient remains, in order to acquire a correct taste. Induced by a love of travelling, and with a mind forgetful of fortune, but intent on fame, he painted in Portugal the decorations for the Italian opera, and made the arrangement for a variety of fêtes. His success surpassed his expectations, and he was honoured with the order di Cristo; and the cavalier Servandoni was required at all the courts in Europe, to prepare and arrange the most pompous festivals.

He presented himself to the French Academy in quality of a landscape painter, and was received with applause. He was declared architectural decorator to the king, and on every occasion presented the most novel and beautiful spectacles. He received honours from almost all the sovereigns, and was sent for to England in 1749, to construct some extraordinary fire-works. He superintended the magnificent festivals given at Verona, in honour of the nuptials of the emperor with the Infanta of Parma. But at Stuttgart he even surpassed himself to gratify the duke of Wirtemberg, who was extravagantly fond of such sumptuous pleasures. To give an idea of the magnificence of

these spectacles, we will only name one, in an opera, in which was represented the triumph of a conqueror: more than four hundred horses appeared on the stage, and performed their evolutions in a most wonderful manner. For the public festivals at Paris, he designed the place de Louis XV., to be covered in such a manner as to allow of 25,000 persons standing under the galleries and peristyles, besides an immense number in the area: it was to be ornamented with 360 columns and 520 pilasters; but, although projected in the capital of this most lively people, it was not executed—a fate attending many of his too expensive designs.

Servandoni constructed a theatre in the castle of Chambord, for the marshal of Saxony; and made designs and a model for the royal theatre at Dresden, which was begun under Augustus III., but interrupted by the breaking out of the war.

In Paris, he erected the façade of Ste. Sulpice, of three orders; the style is grand and noble, but it requires a larger space to be properly seen: in the interior, the tribune for the organ, supported by Corinthian columns, and the decorations for the chapel de Notre Dame. The gate of the Maison de l'Enfant Jésus; the magnificent staircase of the Hôtel du cardinal Auvergne; the round isolated chapel of M. de Live; the rotunda, in form of an ancient temple, with twelve Corinthian columns, for the mareschal de Richlieu, are not mere ephemeral works, but such as will long preserve the name of Servandoni, who in this latter building was allowed to indulge his natural magnificence: it is now used as an ice-house. In the cloister of Sainte Croix de la Bretonnerie, he ornamented a fountain with columns; and in the place de Ste. Sulpice built a large house with a grand staircase. The pleasure-house at Balaine, four leagues from Paris, is extremely elegant, as is also a similar one at Vaugirard for the priests of Ste. Sulpice. The parochial church of Coulanges in

Bourgogne, the great altar of the cathedral at Sens, with the rich baldaquin, supported by four marble columns, and the great altar of the Chartreux at Lyons, are his designs. He made a number of others for very considerable edifices at Brussels, for the marquess of Leyde and the dukes of Aremberg and Ursel, for the court of Portugal; and in England, for the prince of Wales, father of George III. Although this immense number of productions may appear astonishing, there are besides various pictures of architecture, ruins, and views, preserved by the curious in England, France, and elsewhere.

Servandoni married in London, and died at Paris, regretted by all, as every great man must be. He carried his generosity to a folly, perhaps from the habits of prodigality he acquired in consequence of his constant residence at courts, and superintendence of those magnificent and expensive festivals which should only be considered as belonging to monarchs. His architecture was sumptuous in the extreme.

CARLO MURENA, A ROMAN,

(Born 1713, died 1764,)

STUDIED the belles lettres, philosophy, and laws, with the intention of practising in the courts of judicature; but acquiring a strong inclination for architecture, he became the pupil of Niccolo Salvi, and was afterwards sent by his patron, the cardinal Barberini, to Luigi Vanvitelli, who was then building the Lazaretto at Ancona, that he might acquire some knowledge of hydraulics. His rapid progress in his profession induced Vanvitelli to entrust him with the direction of those buildings, to which he could not himself attend. Those of his Sicilian majesty, attached to the Caserta, Murena undertook entirely himself.

His first work was the building for the Olivetani monks of Monte Morcino at Perugia, the church of which he personally superintended to its completion. He designed an isolated tabernacle for the cathedral of Terni, adorned with mixed stones and gilt metal, producing rather an elegant effect; and at Foligno, the church of the monks of the Holy Trinity. His fame increasing, he built the rich Zampaj chapel in San d' Antonio di Portoghesi at Rome. The ornaments of this work are elegant, and the supports of the tablet light, under which stands a small urn. The two sepulchres attached to the lateral walls of this chapel are graceful. The urn is supported by two lions' claws; but these are caprices of which there are so many examples, that it requires great strength of reasoning to avoid being led away with them. Tables and seats terminating in a variety of beasts' feet, as the beautiful female in Horace finishes in a fish, are equally absurd. Two marble Ionic columns flank the altar, over the entablature of which is a needless pediment with statues. The plan of the chapel is rectangular, and the entablature of the altar is formed in a concave, without any apparent reason, here and there concealing some very disgusting angles. Behind these columns are pilasters, as one would imagine merely to create confusion, the capitals of which come in contact with those of the former. At the angles of the chapel, the pilasters are doubled. The columns by the side of the altar are not on pedestals, but on small plinths, like those which are round the church. It appears, therefore, that the tablet of the altar cuts the shaft of the column. Whatever method may be pursued, inconveniences will always arise in putting columns to altars not isolated. First, these columns support nothing; and again, if without pedestals, the greater part of them are hid; and if pedestals are placed under them, they must be made as high as the top of the altar, which detracts from the majesty of the columns, and gives them great poverty of

effect. The sacristy which Murena built at Rome, for the church of Sant' Agostino, is very elegant. Its figure is a rectangle, with the corners taken off, forming a species of oval: the roof is very graceful. The basement, however, is too high, the plinths on plinths, and upon these Corinthian pilasters, is objectionable: the projections of the cornice and pediments might also have been spared.

The fabric which he erected for the Cistercians near Santa Lucia della Chiavica is simple and solid on the exterior, and the internal arrangement of the apartments are distributed with much judgment, being combined with order, convenience, and beauty.

The Bagni chapel in Sant' Alessio, and the great altar in San Pantaleo, which is now finished most miserably by some one else, were both built by him. He acquired great honour by the façade which he designed for the ambassador of France, Rochecouart, on the occasion of that excellent personage being decorated with the holy purple: and had greater length of days been allowed him, he would have acquired farther fame, by his execution of many more important works; but he was suddenly seized with a malady which terminated his existence at the age of fifty-one years. He was a good man, possessed a highly cultivated mind, exceedingly industrious, and rapid in execution. His style of architecture was simple and rational. He fell into some of the prevailing errors, but never into absurdities.

CARLO ZOCCOLI, A NEAPOLITAN,

(Born 1718, died 1771,)

At seventeen years of age entered into the corps of engineers, and very soon became master of fortifications,

and took the precedence of many elder officers. In consequence of a delicate constitution, he quitted a military life, and devoted himself to the civil department, and published a treatise entitled “ *Della Servitu.*” He continued to study mathematics, and gave to the world a work “ *On the Gravitation of Bodies, and the Power of Fluids.*” He then became the oracle of the minister in the different controversies on these subjects, and was chosen by the deputies of the city *Esaminatore de’ Tavolari* of the S. R. Council, in which office he conducted himself with extreme propriety.

His architectural works are: the cathedral, seminary, and episcopal palace of Calvi, planned at Pignatoro; the convent of the Alcanterini, on the mountain of Pignatoro; the church and convent of the Capuchins in Arienzo; the church and baronial palace in Cutignano, near Nola; the monastery and church of the Religiosi in San Giorgio, in the territory of Benevento; the villas of the prince of Supino at Portici, and of the marquess Palomba at Cesa, near to Aversa.

He constructed two windmills at Capua, on the Volturno, where for the first time the practice of the Dutch dikes on canals were adopted; he erected nine other mills at Scilla in Calabria, where he also designed a spacious church, and restored the castle, which was completed by his excellent son, Don Raffaello.

He thoroughly understood the art of building with regard to strength and convenience. He most likely possessed also great taste, but he had not sufficient opportunity to display it. His character was such as generally belongs to those who devote themselves solely to the fine arts and sciences, grave, unaffected, upright, and agreeable.

LUIGI VANVITELLI,

(Born 1700, died 1773,)

A son of Gaspare Van Witel, who was born at Utrecht in 1647, studied painting at Haerlem under Matthias Vetthoes, went to Rome at nineteen, and became an excellent architectural and landscape painter. Gaspara travelled to Venice, Bologna, Milan, and Florence, and painted some fine views of these cities. He then, with his wife Anna Laurenzini, a Roman, went to Naples to Don Luigi della Cerda, duke of Medina Cœli, who stood sponsor to his son Luigi; but they were soon obliged to leave the city, on account of the revolution of Macchia. He fixed his residence at Rome, where he painted for the first persons in Italy and the northern countries, particularly for the houses Sacchetti and Colonna. He was surnamed Gaspare degli Occhiali, from his continual use of spectacles; and he painted when decrepit and afflicted with a cataract: after having lost one eye, he painted, on a large scale, subjects of his own invention. At Campidoglio he was admitted as a Roman citizen, and also to the academy of St. Luke. He died in 1736, esteemed by all, not only for his ability in his peculiar style of painting, but also for his knowledge of history and disputation, and his amiable qualities. He was mild, humane, sincere, generous, and a good friend.

At six years of age Luigi Vanvitelli painted from nature, and at twenty executed the chapel delle Reliquie in Santa Cecilia, in fresco, for the cardinal Acquaviva, and the picture of St. Cecilia in oil. He also painted in San Bartolommeo del' Bergamaschi, and in the Suffragio at Viterbo. He studied architecture under Ivara.

The cardinal di San Clemente took him to Urbino to restore the Albani palace ; besides which he built there the churches of San Francesco and San Domenico. His rising merit procured him the situation of architect of St. Peter's at twenty-six years of age, where he copied a number of pictures for the workers in mosaic.

Being the companion and friend of Salvi, he assisted in conducting the water Vermicino to Rome. He was also a competitor for the façade of San Giovanni Laterano. Such a competition was never before seen. Twenty-two designs were presented by Salvi, Teodoli, Fuga, Cannevari, Gregorini, Passalacqua, Rossi, Bologna, Dotti, and Raguzzini, a Neapolitan. The decision was given by the academicians of St. Luke, in the Quirinal hall. In certain memorials written by his own hand, Vanvitelli says that his designs and one of Salvi's were first chosen ; but that the votes being equal, it was referred to the pope, and that that of Galileo, from national feeling, obtained the preference. Salvi then had the fountain of Trevi, and himself the gate of Ancona. These designs are all preserved in the academy of St. Luke. Vanvitelli made two for this façade ; one of a single order, the other of two. In the latter, the lower consists of isolated Corinthian columns, six of which project so as to form a species of triangular front : within and without the vestibule are trophies in bas-relief, with a pediment. The upper order is Composite, with a pediment, balustrades, and large statues.

Vanvitelli then went to Ancona, where he planned the Lazzaretto of a pentagonal form with a bastion, having first studied those of Leghorn, Genoa, and Venice. In this structure, which is 220 feet long and 46 deep, with a gate of Doric columns, the first cassoon, which was built under his own direction, was destroyed by a storm which he himself had foreseen would be the case, and in vain protested against the use of pozzolana or cinder of Baja. While at Ancona, he made a number of designs for the

chapel in which is contained the relics of St. Ciriaco, for the repairing the church del Gesu, and that of Santo Agostino, the Casa degli Esercizj Spirituali; at Macerata, for the chapel of Misericordia; at Perugia, for the church and monastery of the Olivetani; at Pesaro, for the church of the Maddelena; at Foligno, for the restoration of the cathedral; at Siena, for Sant' Agostino, afterwards spoiled by others.

At Rome he made some additional rooms to the library of the Roman College, repaired the Rufinella at Frascati, and for the Portuguese minister directed the work of a rich chapel, which was removed and placed in the church of the Jesuits at Lisbon, endowed by the king, whose son afterwards destroyed it. But Vanvitelli's greatest effort at Rome was the convent of Sant' Agostino, a most superb building.

In 1745 he went to Milan to design the façade for the cathedral, which he intended to be in the style between the Gothic and Greek; but the breaking out of the war prevented its execution.

Monsieur Bottari is of opinion that he gave the alarm on the subject of the Vatican cupola, and also placed the iron hoops around it. Each of these, which are described in his *Memorie di Vanvitelli*, consists of thirty-two pieces.

Vanvitelli, in his *Memorie*, declares himself the author of the movable scaffold in the interior of the Vatican cupola, used for the purpose of stopping the fissures; while not only Bottari, but all Rome, attribute it to Niccola Zabaglia. But Zabaglia is also said to have erected the scaffolding for the repairing of the cross on the obelisk; and Vanvitelli asserts it to have been the invention of Carlo Fontana in 1702, and executed by Zabaglia, who, on its being required a second time, used it as if originated by him; and, as such, Bottari has placed it among his prints of machines made by Zabaglia.

For the holy year of 1750, Vanvitelli arranged the ornaments of the tribune in St. Peter's, the illumination of the

cupola in a new style, the preparations for a consecration, the obsequies of the queen of England, and the removal of the *Pieta* of Michael Angelo.

His *Memorie* mentions that it was Clement Orlandi who, in the Certosa at Rome, at the desire of the friars, closed the gate and three arches of the grand hall, to place in each of them two drawings of the Vatican, and that it was Vanvitelli who first proposed to re-open them and place two columns, similar to the eight others of Egyptian granite, and between each of the arches a picture of that building. That in the vestibule, from which the baths were heated, he arranged four mortuary chapels with cornices round them, and square coffers in the roof, as in the Pantheon; and that the arch being low and disproportionate, he designed some corbels in the antique style with shells, thus to conceal this low passage leading to a lofty hall, in which were to be eight other columns, also similar to the antique, which are opposite to the grand chapel degli Angeli, or great altar. That within this vestibule or caldarium, were the four small chapels adorned by Michael Angelo with beautiful Ionic pilasters. That over the entablature, instead of those small pediments with frightful candelabras, falsely attributed to Michael Angelo, he intended triangular pediments, similar to those of Bramante, afterwards imitated by Sangallo and Michael Angelo in the Vatican chapels; but that the friars, to avoid the incurring such expense, had the arches walled up, and instead of the sixteen intended columns, contented themselves with eight in the entrance.

It appears that Vanvitelli had written these memoirs to rebut the censures of Bottari; but, occupied with greater considerations, these contemptible differences were forgotten. Artists are certainly like statesmen, frequently condemned without being heard, and either cannot defend themselves, want the time to do so, or are too careless to take the trouble. However it may be with this Carthusian

monastery, it is certainly the most majestic church in Rome; and Benedict XIV., in restoring Santa Maria Maggiore, in which an architect spoiled one of Michael Angelo's finest Corinthian orders, said, "That he at a great expense had turned a basilica into a barn, while the Carthusians, with very little money, had of a barn made a grand basilica."

The reputation acquired by Vanvitelli was so great, that he was selected by the court of Naples, from among many celebrated artists then living, to superintend the building of the royal residence at Caserta, which may at least vie with whatever has been built by the most renowned architects, and by order of the most sumptuous monarchs in the world.

During the construction of so many fabrics, Vanvitelli increasing in credit, and indefatigable in his attention to his various duties, made a number of designs for works both public and private. The following is a catalogue of them :—

In Naples, the cavalry barracks at the Ponte Maddalena; an extremely solid edifice, and well calculated for its purpose, both in appearance and in every internal convenience. Some attribute this building to Sabbatini, who probably had some share in it.

The staircase, sacristy, and chapel of the Conception, at San Luigi di Palazzo.

The Doric colonnade at the Largo dello Spirito Santo, for the equestrian statue of Charles III. king of Spain. This decoration is well imagined: it does not ornament a square, but an irregular space; it is also out of the centre, and has no connexion with the adjacent arrangements.

The churches of San Marcellino, della Rotonda, and della Nunziata. The latter merits a description, both from its beauties and defects; but this would exceed our limits.

The façade of Genzana palace at Fontana Medina; the great gate, staircase, and continuation of the Calabritto palace at Chiaga.

At Resina, the casino of Campolieto. At Matalone, an altar and pix. At Benevento, a bridge.

At Brescia, the public hall, and at Milan the new arch-ducal palace.

On the nuptials of the reigning sovereigns of Naples, all the external decorations of the royal palace, and the dining-room, with every other embellishment in the palace of the princes of Teora at Chiaga, where the count of Kaunitz, ambassador from Vienna, celebrated the same event by most sumptuous festivals. Also similar arrangements for the fetes given by the duke of Arcos, ambassador extraordinary of Spain, on the first accouchement of the queen.

This was the last work of the celebrated Vanvitelli, who died a short time after, in the same city in which he was born. But amidst so much prosperity, he had the misfortune, towards the close of life, to be disgracefully condemned at Rome. He had calculated the repairs of an aqueduct of the Acqua Felice at Pantano to amount to 2000 crowns: the actual expense amounted to 22,000, and the Roman judges sentenced him to pay 5000 of them himself.

Of all the above-mentioned works, with many others, an exact and useful description is given by his excellent son Carlo, professor of architecture, or his other, Gaspare, a student in jurisprudence.

Luigi was of gentle deportment, a studious and indefatigable draughtsman, well acquainted with mechanics and the distribution and decoration of edifices, variable in his taste, as frequently occurs, and sometimes forgetting unity and convenience. In outlines of the orders, in which the law of optics can never suffer the nearest object to be large, and the most distant small, he fre-

quently erred ; but to know Vanvitelli, we must consider his grand work of the Caserta palace.

In his dedication to the king he says, “ I consider myself but the mere executor of the sublime ideas conceived by your majesty, and only deserving credit for having attended to the dimensions prescribed to me, in the advantageous situation fixed on for the erection of a spacious and lofty palace, composed of the most precious materials, which are so plentifully produced in your majesty’s vast dominions, and for planting a garden which certainly cannot yield to any in the world.”

The first stone was laid with great ceremony the 28th of January, 1752; the whole court being present, and the area designed for the building occupied with battalions of infantry and squadrons of cavalry. Among the gold and silver medals usually placed under the foundation stone by sovereigns, was one alluding to our architect, bearing the following distich :—

Stet Domus, et Solium, et So-
boles Barbonica, donec
Ad superos, propria vi lapis
hic redeat.

LUDOVICUS VANVITELLIUS, Arch.

This was indeed a day of triumph for the architect, who saw himself the object of general attention throughout the whole court.

The palace has towards the south a large elliptical piazza, from which proceed three wide avenues, bordered with trees, and surrounded by barracks for all the guards, both infantry and cavalry, and at the back by stables and coach-houses, with residences for the persons attached to them. Between these buildings and the palace are, on one side, riding-schools, covered and open, and on the other, a public theatre. Behind the palace, towards the north, are gardens of every description, woods, pleasure-

houses, fisheries, and fountains, dedicated to the heathen gods.

The plan of this palace is a vast rectangle, 731 feet long from east to west, 569 from north to south, and 106 feet in height. The interior is divided into four courts, 162 feet by 244. The depth of building that surrounds these courts, in which are the rooms, passages, &c., is 80 feet; in this dimension is comprehended the thickness of the walls, which are in some instances 15 feet. The two principal façades have five stories besides the subterranean one, and each containing thirty-seven windows. There are three entrances; one in the centre, and the others at equal distances between it and the extreme angles, where, as well as in the centre, the building breaks forward a little, is carried up to the height of 60 feet, and formed into pavilions, by columns 42 feet high. Thus the whole height of the building is 102 feet, from the foundation to the top of the pavilion at the angles 162 feet, and in the centre 190 feet.

The basement, which is rusticated, comprises the lower offices, the ground floor, and its mezzanine. Above is placed an Ionic order of columns and pilasters, which contains the two ranges of state apartments; the lower windows are ornamented with pediments; in the frieze are introduced the windows of the upper mezzanine.

The centre entrance leads to a superb portico, which traverses the building from north to south, and is sufficiently spacious to allow carriages to pass under from either façade to the centre of the building, where is a large octangular vestibule, which unites the arms of the cross, produced by dividing the plan into four courts; two sides of the octagon are open to the portico, four to the four courts, one to the grand staircase, and the eighth is occupied by a statue of Hercules, crowned by Virtue, with this inscription:—

Virtus post fortia facta coronat.

The grand staircase, which is on the right, is lighted by twenty-four windows, and decorated in a beautiful style. At the first landing it is divided into two flights; the hundred steps of which it is composed are 18 feet long, and each of one piece of marble; it is lighted also from the top by a double skylight. The upper vestibule is also octangular, and surrounded by twenty-four columns of yellow marble 18 feet high. Four doors lead from thence to the apartments; the one opposite the landing to the chapel, that to the right to the apartments of the king, which comprehend the south-west angle of the building, overlooking the sea and the plains of Naples and Capua; to the left are the apartments of the queen, occupying the north-west angle; the remainder of these floors are occupied by the princes. The chambers throughout are vaulted, and admirably arranged: the apartments of the king and queen are separated by a gallery 138 feet long, 42 wide, and 52 high.

The palace contains a small elegant theatre, of a circular plan, divided into nine compartments, with four orders of boxes.

The chapel is rectangular in its plan, with the end terminated semicircularly, and decorated with isolated Corinthian columns on pedestals, with an entablature, in which the cornice is not omitted. The marbles and sculptures throughout are of the richest kind; the apartments generally well arranged and distributed, of magnificent dimensions, and of various forms. The whole is a rare assemblage of vastness, regularity, symmetry, richness, ease, and elegance. The multiplicity of windows are certainly at variance with propriety.

But the most wonderful part of this vast work has not yet been described. There are ranges of aqueducts of a great height, and of sufficient length to unite the two Tifati mountains near Forche Caudine.

The waters on the mountains are collected into a canal,

for the purpose of supplying these aqueducts, and conducted to various lakes and fountains of every description. To the embellishments of this royal residence is added a convenience and solidity that throws into shade all that has been done before or since.

JACQUES FRANCOIS BLONDEL, OF ROUEN,

(Born 1705, died 1773,)

AN architect of great ability, who has embellished France with a number of buildings, and published some excellent engravings of them, which may be consulted by those who are desirous of studying his style.

At Metz he constructed, in 1764, the royal abbey of St. Louis des Dames Chanoines; a well-arranged building, to which is attached a beautiful church. The façade of this church consists of a well-proportioned and spacious portico of four Corinthian columns, with a pediment. The order rests on a plinth placed on a flight of steps; the door occupies the centre intercolumniation, and in the two lateral ones are niches containing statues. Above these is an attic with bas-reliefs. The interior of the church is composed of a small nave flanked by two lesser ones, the sanctuary and choir, behind which is the campanile. A gallery runs round the church, which communicates to the various apartments of the Dames Chanoines. The sanctuary is a rotunda of Corinthian pilasters, covered by a cupola, and in the centre is the great altar isolated in a line with the choir and nave: the sanctuary is elevated nine steps above the nave. The architect has here availed himself of the inequality of the soil, to give that air of majesty so consistent for this sort of edifice. In the same

city, and under the superintendence of the mareschal d'Etrées, and afterwards of the mareschal Broglio, he formed a beautiful square and street leading to the cathedral, an elegant Gothic edifice, to the façade of which he attached a Doric portico, and adapted a variety of decorations to the interior. He erected the magnificent Hôtel de Ville in an elevated situation, opposite to which he raised another edifice; near to this latter, a guard-house, with magazines, and facing that, the beautiful façade of the parliament house: and, finally, the sumptuous archiepiscopal palace, arranged around a square court.

He evinced no less intelligence at Strasburg, where, by order of the magistracy in 1768, he made the plan for rendering that frontier town more regular, and arranged a new square for the military, new barracks for the infantry and cavalry, a hall for spectacles, or rather an amphitheatre, with three orders of boxes, a royal square, a palace for the senate, markets, and a number of stone bridges. Strasburg is called the city of a hundred bridges, which were originally all of wood; it is now, by attention and proper arrangements, one of the finest cities in Europe.

At Cambray he made many improvements similar to those at Strasburg, and erected a sumptuous gate for the archiepiscopal palace, flanked by two isolated Ionic columns, supporting a projecting entablature, with a pediment and statues. Some miles distant from this city, at Château Cambresis, he designed a beautiful country palace and gardens for the same archbishop; with a variety of other buildings throughout Germany and France:

Blondel also illustrated the last edition of d'Aviler, and three volumes of the "Architecture Française," with 600 engravings of the principal edifices of France. These three volumes were to have been followed by five others.

A public spirit and a desire of contributing to the

growth of the fine arts, led him, in 1744, to establish a school of architecture at Paris, which became in the course of time of great importance. Besides teaching his pupils architecture, he required that they should be well acquainted with mathematics, the cutting of stones, painting, sculpture, and every other art relative to building. He also contributed all the parts relating to architecture in the *Encyclopédie*.

But the work of the most general utility is his "*Cours d'Architecture*," the result, as he himself declares, of forty years experience and research. It is divided into three parts: the first relating to Beauty or Decoration, and is comprehended in two vols. 8vo, with another containing engravings; the second to Convenience or Distribution, and contains an equal number of volumes; of which number the third part, on the Solidity of Buildings, would also have consisted, had the industrious author been granted a longer life. Its characteristics are prolixity and tautology, with a minute detail of those rules to which he was attached, but which, by a constant repetition, weary and disgust. Excepting, however, these peculiarities, the work is generally useful: it contains whatever is scattered throughout other treatises; the reasoning is just; the information new and well deduced; and M. Blondel appears as good a citizen as he was an architect.

An architect should unite to his various other talents, a most extensive knowledge in the arts and sciences. 1st, He is required to possess a complete and enlarged acquaintance with the customs and usages of the principal nations, and more particularly of that in which he resides; he cannot otherwise arrange his buildings according to the rank and style of the proprietors. The peculiarities and arrangements of each person vary according to their tastes and habits; and all these points must be considered, or the most absurd mistakes will be committed. Profiting also by the best methods adopted elsewhere, he will know

how to introduce them in his own fabrics, and these novel ideas will be readily approved by his employers.

2d, His knowledge will, however, be useless, unless the architect possess a ready judgment to discern what is requisite and convenient for each state of civil life. Without this discernment he will give the spade to the nobleman, and the robe to the peasant.

3d, He must be ingenious in invention and arrangement, not only in the disposition of what is absolutely necessary in his buildings, but also in varying that disposition according to the taste of the proprietor, and the peculiarities of time, place, and circumstances; if he have not above one or two models in his mind for each species of building, he will run a great risk of committing incongruities. Ingenuity, directed by a sound judgment, will enable him to surmount all obstacles, and to arrange every convenience and whim of his employer in such a manner as not to infringe upon good taste, or the principle which ever should guide him in his design.

4th, Purity of taste in every kind of ornament is another necessary quality, by which the architect unites elegance with magnificence in the interior, produces a more suitable majesty, and augments the effect of the whole by the proper selection of particular beauties.

5th, The architect must finally be master of the different branches of mathematics, natural history, mechanics, and of all the arts belonging to construction, though he may not be required to practise them.

Furnished with this preliminary knowledge, the young architect may study with attention the best treatises on architecture, and the principal buildings throughout Europe. He will form a choice collection of every kind; he will contemplate them with a penetrating eye, both in the whole and in detail, in position and form, in the ornaments and the different relations, never omitting to use the compass and scale. In these researches and in his own

designs, it is essential that he should go back to the first principles of the art, and question himself in each part of the building thus:—For what purpose was this placed? how is this part adapted to its office? does this contribute to the appearance, solidity, convenience, or embellishment? does this arrangement, or would any other better, fulfil its purpose? In this inquiry neither the authority or celebrity of the writers or artists must be considered, — the decision must be the result of reason.

With this fund of knowledge, the architect will travel to examine the most remarkable edifices, and will discover many things which cannot be indicated in simple plans; he will not only observe isolated buildings of every kind, but those of a city, whether they are perfect, or what they may further require to possess externally and internally all the convenience and beauty of which they may be susceptible. His view must extend from the houses to the palaces, and, finally, to the policy not only of cities but of whole kingdoms. He who is destitute of genius, nurtured by extensive knowledge, should never aspire to become the architect to a great sovereign; though it must be confessed with regret, that men thus qualified are extremely rare.

The same talents which are required in every other artist must also be possessed by the architect:—Genius, which gives to the works of art their importance and dignity, and imparts the power of fixing the attention, and taking possession both of the minds and hearts of men; good taste, which spreads beauty, grace, and harmony over every object: to these must be added a strong imagination, the same fire which warmed Raphael and Homer must animate the architect who aspires to celebrity. The circumstances which occasion an edifice to be built also determine the principal parts of it; the rules of mechanics and geometry give it necessary solidity; but to compose, of parts arising out of arbitrary circumstances, a whole

which shall in every particular satisfy the imagination, sustain the examination of reason, and keep the intellect in a continued state of activity, excite agreeable impressions, and affect the mind with the various sentiments of pleasure and devotion,—requires a genius tempered by sound sense and good taste; and possessing this, the architect may hope to ensure himself a distinguished rank among the first class of artists.

Considered both in its object and in its effects, architecture does not yield in importance to any one of the fine arts. It is the foundation of all, and contributes with the rest to the improvement of the human intellect, the progress of which greatly depends on the beauty, circumstances, conveniences, and other advantages of our native country. The architecture of Athens must necessarily have ennobled the minds of the Athenians, as the miserable huts of the Hottentots and of our peasants must debase theirs.

Excellence in the art of building does honour to a nation, equally with every other talent which it cultivates. Ill-arranged edifices, however vast or however sumptuous, are infallible proofs that the nation to which they belong possesses neither taste, judgment, nor order. On the contrary, we naturally form an advantageous idea of that people, whose ordinary buildings evince, even in their most trifling arrangements, a beautiful simplicity, a just relation of parts, and a cultivated taste. Elian tells us, that a painter of Thebes having executed a bad picture, was condemned to a pecuniary fine. It is important that a polished state should establish laws to prevent defects in architecture,—a subject which merits the attention of a wise legislature, even to the lesser dwellings of private persons. Architecture might be made the means of influencing the habits of modern nations, perhaps even more than music did the Spartans.

The effects of good taste in building are, 1st, Nothing

will be done without reflection, and a well-regulated imagination ; each part will be in harmony with the whole, and such an equilibrium will be maintained throughout, that no one will predominate over the other, and no defect or extravagance excite attention ; the form, style, and character, will correspond with its intended purpose ; there will be no member or ornament for which the eye does not immediately account ; simplicity will be preferred to an excess of embellishment ; and even in the most minute parts the industrious attention of the artist will be evident. All these beauties we admire in the few remains left us of the golden age of Grecian architecture — models of the purest taste.

The moment a nation emerges from barbarism, has time to reflect, and begins to have some notions of order and convenience, its first effort of intellect will naturally be directed to architecture. It is in the nature of man to prefer order to disorder ; architecture had its origin in the remotest times, and was peculiar to no particular country. A sort of geographical picture, in which should be expressed the various tastes of all nations who have cultivated this art without any communication with each other, would be both interesting and instructive. From it we might deduce some opinions on the national character of a people ; we should every where find the same principles, but a difference in the manner of applying them.

The taste now adopted in Europe is in its basis the same which formerly flourished in Greece and Italy, as history tells us. From Russia to Portugal, from Stockholm to Palermo, we find occasionally edifices which, though certainly not without defects, considered in the gross, are constructed in good taste ; but these works are too few in number to enable us to say that good architecture is generally practised in Europe. There are many considerable cities in which we can scarcely perceive a

glimpse of it; but it only requires the models of Greece and Italy to be well studied, and this defect would quickly be repaired.

The use for which an edifice is intended almost always gives the architect an idea of its extent and the number of its parts, provided he have common sense to distinguish what in each case is suitable to the time, place, or persons. To him is entrusted the distribution of the parts and the plan of the whole. In this he must be directed by certain principles, lest he should form a wrong judgment of beauty. He must also be experienced, that he may know how to apply this powerful auxiliary in all cases, its fundamental rules being by no means determined.

The theory of architecture performs this; it gives two sorts of rules, some *necessary*, which are indispensable to observe, without committing the most offensive and revolting errors; others *accessary*, which may be omitted without rendering the work defective, but must prevent its being beautiful.

The rules of the first kind, and which theory must determine, are reduced to justness, regularity, order, and symmetry: remove these attributes, and the work is incorrect. But it is not sufficient that a work be without defects, it should also be beautiful; and to be so, there must be an exact union of the pluralities with the unities; and this depends on the variety of the parts and the number and justness of the proportions. Theory, then, teaches the manner of disposing the whole of an edifice, and combining a number of parts, so as to produce correct harmony and beautiful proportion. Some are scrupulous in making the metopes square and equally high with the triglyphs, and yet this is not essential, but they will not scruple to cut the pediment and put it where it should not be; this is against the *necessary* rules, founded on the nature of construction. The *accessary*, or accidental rules, are the result of a *coup-d'œil* and of sentiment, to which no precise

limits can be assigned. The Greeks having this precision of sight, their proportions please, and their ornaments are graceful; but no one can affirm that these are unalterable, and that they may not be superseded by others still more agreeable. The necessary rules must be rigorously observed, without attempting to alter them; the accidental ones may be taken from the best monuments, and from Vitruvius; but some liberty may be allowed.

The above is an epitome of M. Blondel's work, and of the "General Theory of the Fine Arts," by M. Sulzer.

PAOLO POSI, OF SIENNA,

(Born 1708, died 1776.)

AT a very early age fixed his residence at Rome, where he had the reputation of principal architect during his life. He constructed the Case del' Progetti, in the cities of Narni and Viterbo; he gave some designs for the restoration of the cathedral at Naples, when the cardinal Spinelli was archbishop. He was curious in designing mausoleums, and executed a great number; one of the cardinal Inico Carraccioli, in Aversa; of the cardinal Imperiali, in Santo Agostino, at Rome; of the cardinal Caraffa, in Sant' Andrea de la Fratte, and of the princess Chigi, in the Madonna del Popolo. His erections for the obsequies of Benedict XIV. in the Vatican, for James the Third, of the Stuarts, in the Santi Apostoli, and for Carlo Emanuell, king of Sardinia, in the Sudaris, were equally whimsical. He displayed the same taste in the fictitious façade erected in honour of the elevation of the cardinals Protocarrero, Crivelli, and Pamfilj, to the purple; but he most evinced his ingenuity in the machines for fireworks, which he

superintended for many years as architect to the Casa Colonna. He decorated the great altar of the church della Anime as if it had been a temple to Bacchus; on which account the German deputies displaced him from the situation of architect to this their church. He was nominated architect to St. Peter's, and knight of the Golden Spur; but he only adorned the altar of the Quirinal chapel. At Sinigaglia he designed the church and house of the Jesuits, and the palace of the abbot Farsetti, a Venetian, in the town of Sala; but his arrangements for converting the palace at Venice into an academy of the fine arts, were not approved.

He modernised the Colonna palace, and rebuilt the national church of Santa Caterina, at Sienna, in the Strada Giulia, loading it with all the modern architectural defects. He had great talents, without being a good architect.

CONTE ALESSANDRO POMPEI,

A VERONESE,

(Born 1705.)

FROM his tenderest years he had a great inclination for drawing, although never in the habit of seeing any one exercise the art. His father dying in his infancy, the difficult task of directing his education devolved upon his mother, and at twelve years of age she sent him to the college of noblemen at Parma, where, though pursuing the sciences, and practising equestrian exercises, he never omitted to cultivate his taste for drawing. His industry, at length, enabled him to design and use his pencil well. His master was Clemente Ruta, a pupil of the famous

Cignani, and an excellent painter, who after serving the royal court at Naples, retired to Parma, where he died at an advanced age.

On the Conte Pompei leaving college, he did not enroll himself among the number of those who neglect their reason with that excellent argument, that they are noble and rich, and may, therefore, be allowed to live in idleness. Nor did he, like others, throw at once aside all the advantages of a good education, and plunge into disgraceful pleasures. He knew, as we all ought to know, that man was born to become useful to himself and others, and that such is the imperious duty of every one in a social state. Rich or poor, noble or plebeian, every idle citizen is a burden on the community. It is an old, but just proverb, that from doing nothing we soon proceed to doing ill. But to return to our subject:—The count devoted his attention to the cultivation of the sciences, and to painting, under the direction of the renowned Antonio Balestra, and after having copied a number of his works, he began to paint from his own composition; continuing this noble amusement as much as his time would allow.

In 1731, being desirous of rebuilding his palace in the Villa Illasi from the foundation, and not finding in Verona an architect equal to the undertaking, he turned his thoughts to architecture. He studied from the best books, and acquired the requisite knowledge, not from masters, but from his own reasoning; and Verona soon possessed a noble architect, equally excellent in theory and practice.

In 1735 he published his work, entitled, “*I Cinque Ordini dell' Architettura Civile di Michele Sanmicheli* ;”—a work which brought glory to the author, and proved useful to the public. By it he evinced a rational patriotism, in making known to the world the merit of his fellow-citizen Sanmicheli, who, though he never wrote upon architecture, executed a variety of buildings, particularly in Verona.

Pompei described the five orders of architecture employed by him, and made a parallel between them and the orders practised by Vitruvius, Leon Batista, Alberti, Serlio, Palladio, Scamozzi, and Vignola. He thus methodically collected together, under one view, the opinions of seven architects of the first class, and these all Italians, on what was most beautiful in the several orders: this was preceded by an abridged life of each. The whole work contains much useful information: one of its most valuable qualities is his continual disapprobation of the modern absurdities. But it is of no avail; whims and abuses will predominate; and even in Rome itself, the work of Pompei, which ought to be in the hands of every man of science, is entirely unknown. It seems, indeed, that Italy is content with the vain glory of having once been at the head of every invention, and now blushes not to be the last in the scale of excellence.

This work, and his palace at Illasi, which was universally admired, acquired to Pompei the title of a great architect and a useful citizen. He built two well-arranged palaces for the marquess Pindimonti, in the village of Vo, on the Veronese, and for the count Giuliari, in that of Sessino. In the town of Sanguinetto he also designed a little church, circular on the exterior, and octangular in the interior; which, being at the intersection of three streets, has three equal façades. He built a dormitory, with a magnificent staircase, for the monks of San Michelle, in Campagna, and made designs for a new church, but it was not executed, the monks contenting themselves with restoring the old one.

At Verona the Signor Conte had a number of employments. He erected a vast exchange for the city, which contained all the merchandise of Germany, with a grand court in the centre 160 feet long, and wide in proportion, surrounded by two orders of galleries, supported by columns of stone, and an entablature of the same material. There

are forty-eight large rooms for the convenience of the merchants, and a staircase at each of the four angles. In the front is a vast Doric portico, supported by eight stone columns, of great height. The façade, towards the gardens of the marquess Spolverini, is also his work; it has a vestibule in the centre with four fluted columns.

The marquess Scipione Maffei, wishing to place the fragments he had collected in the court of the Philharmonic Academy, entrusted the charge of building the portico, which it required, to the count Pompei, who, rather in compliance with the wishes of the marquess than to the satisfaction of his own feelings, which inclined him to a more majestic style, designed the edifice as we now see it. The library of the Franciscan fathers at Bergamo, is also his design.

The façade of the church of San Paolo di Campo Marzo, which he designed, was only erected a few years since. The marble pedestal of the Antenna di Piazza is his work, as are also the pilasters in the little piazza before the palace of the count Ottaviano Pellegrini. The admirable abilities of the count Poleni were frequently exercised in various parts of the city, no one attempting either to restore or erect an edifice without his assistance.

Although the weight of domestic affairs had pressed upon him for some years, in consequence of the death of his brother, and diverted his attention from the use of the pencil, he was constantly employed for the service of his country. The city chose him president of the Academy of Painting, lately erected there. He directed it with wisdom, and procured it many important advantages.

CONTE GIROLAMO DAL POZZO, A VERONESE,

(Born 1718.)

A good education, an excellent disposition, and superior talents, all contributed to render the subject of this memoir a perfect nobleman. His masters in the fine arts and philosophy were the two celebrated brothers Don Pietro and Don Girolamo Ballerini. The signor conte Girolamo had naturally a love for study, and it formed in after-life his greatest source of delight. His inclination led him to architecture and drawing, and he succeeded in both, although without a master in either; but he studied Vitruvius, Palladio, Scamozzi, and the ancient buildings with attention, copied the best designs, and became an intelligent and reasonable architect. Perceiving the extravagant fashion of the present century, he endeavoured to improve it by precept and example, and to establish a beautiful style after the antique.

The delightful villa of the counts Trissino, on the Vicentino, is the work of our noble artist. This villa is situated on the summit of a hill, and consists of a sumptuous and well-arranged palace, ornamented with gardens and courts.

In the Marquisate of Castellaro, on the Mantuan river, is a church, not of large dimensions, designed by the count dal Pozzo, who has produced an air of novelty, without departing from the rules of ancient masters.

He was constantly employed on a number of other works, shewing his usual courtesy to his friends, and to all who required his opinion.

Some young nobles, male and female, being desirous of amusing themselves by acting tragedies, the count arranged the scenic part of a little theatre. The idea was

entirely taken from the ancients, and adapted to the situation assigned for it, the paved hall of the Philharmonic Academy at Verona.

A perspective drawing of this theatre adorns the title-page of the tragedy "*Il Medo*," published and performed the same year, and dedicated to his highness the Elector of Bavaria, by the Philharmonic Academy, to whose inspection the plan and elevation had been submitted; his approbation of which was signified by presenting the architect with a snuff-box, enriched with diamonds of great value, and desiring a copy of the design to be placed in his own gallery.

At the request of a learned Englishwoman, lady White, who had resided some time at Verona, and contracted a friendship for the count dal Pozzo, he composed a treatise, entitled, "*Degli Ornamenti dell' Architettura Civile secondo gli Antichi*."

This work is exceedingly useful for the information it contains, and gives a very correct idea of the first rudiments of architecture. It has already been used in a public school, and with great success. The first part gives the terms of all the members which compose the ornaments of architecture, with their etymology, then the ornaments themselves, their origin and use among the ancients, and concludes with a treatise on modern abuses. Much matter is compressed into a small volume.

It is to be regretted that a work so much approved by the most correct judges should not yet have been published. There is another, "*Sopra i Teatri degli Antichi e sul Idea d'un Teatro adatto all' Uso Moderno*." He was celebrated for his literary attainments throughout Europe; the Royal Academy at Parma, and the Clementina at Bologna, nominated him their associate. He would have been declared a member of the most renowned northern academies, but for his sudden death. He was, indeed, a person of most singular merit; and to great morality

of conduct, united a perfect acquaintance with the belles lettres and various sciences. His style in architecture was a mixture of Palladio and San Micheli: his principal members were never broken, the ornaments were always well adapted, and the whole was correct and harmonious.

FERDINANDO FUGA,

(Born 1699,)

SON of Giovanni Fuga and Antonia Seravalle, both of distinguished families of Florence, and much regarded by the house of Medici, as also by the hereditary prince Ferdinand, and his consort, the princess Violante of Bavaria, who was one of his sponsors. Although an only son, he received a good education. At twelve years of age he began to study the elements of architecture under Giambattista Fugini, an architect and sculptor of some eminence; at eighteen he was sent to Rome, where, delighted with its ancient remains and modern works, he fixed his residence, and, finally, married at the age of eight and twenty.

A short time previous to this event he was sent to Naples, by the cardinal del Giudice, to erect a public chapel in the portico of the court of his palace, called di Cellamare:—an expensive but elegant work.

In 1728, he was sent for to Palermo, by a deputation from that kingdom, to design a bridge of some importance over the Milcia river, which was afterwards executed by others. Fuga was called to Rome, on Clement XII. assuming the tiara, who appointed him one of the two architects of the pontifical palace; a circumstance which

opened a wide field for the display of this architect's talents and ingenuity.

He finished the mews opposite the Quirinal palace, built by Alexander Specchi, in the form of a small palace, to which the horses ascend by a flight of steps of two branches. On each side of this mews were the barracks for the soldiers and the dwellings for the officers.

He considerably enlarged a palace which had formerly been the residence of the pontifical family, for the secretary of the great seal, and the captain of the Swiss guards : its style possesses much grace.

The palace of the consul, on Monte Cavallo, is a work of great importance, noble in its appearance, and divided into quarters, for the convenience of the horses and carriages ; apartments for the secretary of the briefs and the consul, with all the requisite arrangements for their various attendants. The interior is conveniently distributed, although some of the parts are too dark. The court has an agreeable effect from the portico opposite the great door, being formed by an arch, supported by two isolated Doric columns, at the side of which are two level arches, somewhat narrow ; opposite this arch, is an entrance to the double flight of steps. The façade is a beautiful rustic, from the basement to the mezzanine story, above which is the state floor, with Ionic pilasters at the angles and in the centre. In the frieze are mezzanines, and on the entablature, a balustrade. The centre gate is decorated with two Doric columns ; the pediment has a little projection, and is too much loaded with sculpture, which is also the case over the lateral doors and the centre of the entablature. At a little distance from this edifice he built another, consisting of coach-houses and magazines, for the pontifical mews, in the Conetrada del Boschetto.

He erected the church della Morte in the Strada Guilia, of a graceful elliptic form, with well-disposed columns between the altars ; but the rest of the decorations, as also

the façade, which is of two orders, Corinthian and Composite, with projections and broken pediments, are injured by a repetition of the modern defects.

He also constructed the church of the Bambin Gesu, on foundations which had been laid by others; to which he endeavoured to adapt his elevation, adding only some dwellings for the priests on one side, and the monastery, which was afterwards finished, on the other. The façade is too elevated, and the pediment sharp and heavy.

He also directed the new prison for the women, opposite to Porta Portese, and those at Frosinone.

The new façade of Santa Maria Maggiore was his design, and rendered somewhat difficult of arrangement on account of being obliged to retain the ancient mosaics in the upper order, as they stood in the original façade. On one side, he erected the royal staircase to ascend to the loggia of Benediction; and on the other, the sacristy with various habitations above, for the canons and beneficed clergy. The inferior portico possesses nothing majestic. The façade has also two orders of separate columns, Ionic and Corinthian; the effect is not good. The residence for the canons does not unite well either in front or behind with the rest of the basilica, which is of the Corinthian order; these former are simple, and their doors loaded with double pediments.

He also restored the interior, with the obligation of leaving untouched the arrangement of the columns in the great nave; thus the small naves were rebuilt with the same spaces between the pilasters, and in each of these spaces was placed an altar. Hence has resulted a number of small objects, which are inconsistent with the grandeur of the church. He also erected the papal altar, for which purpose he used four antique columns of porphyry, and an urn of the same material; but although he increased the columns with branches of metal gilt, they appear too slender.

He considerably enlarged the great hospital of Santo Spirito, by adding the anatomical theatre, and various apartments for the attendants, on the opposite side towards Lungara: he also built the house for illegitimate female children. He formed a large cemetery for the first-mentioned hospital, well laid out, and advantageously situated opposite the bastions of the Barberini palace.

He constructed the church of Sant' Apollinare, and annexed the Hungarian Germaine college; a large but insignificant building. The interior of the church is common; there are two orders in the façade, with five pediments, one over the other; and the whole of the architecture has all the defects and inconsistencies of the times.

The Triclinio in the piazza of San Giovanni Laterano, is the design of the chevalier Fuga, as is also the Petronj palace, in the piazza del Gesu, and that of the Corsini at the Lungara.

The Petronj palace is of a middle size, with a rustic façade, simple throughout the ground story, above which are Ionic pilasters, including two ranges of windows: in the frieze are mezzanines, and over the entablature a balustrade. The great gate is flanked by small pilasters, diminished below like two pyramids reversed. This is an idea truly modern; and originated with Michael Angelo in the sepulchre of Julius II.; its taste cannot be commended. Nor is there less extravagance in the reversed balustrades over the great doors.

The Corsini palace is one of the most superb in Rome. The internal arrangements are truly noble. There are three gates in the centre of the façade; the middle one leads direct to the villa, which presents a stately appearance; the lateral ones lead to a magnificent staircase, which unites to another belonging to the apartments. The façade is distributed in a grand style: there are no orders, but it has rustic piers. The ornaments of the

windows are not in the best taste ; and the double pediments on the upper story are quite original.

He erected a number of other buildings in Rome ; and particularly for the service of the royal church of San Giacomo degli Spagnuoli, in which he afterwards made superb arrangements for the obsequies of the queen *Æmilia* of Spain, consort of Charles III. While at Rome, he sent his designs for the church of the monks of Santa Caterina della Rota, at Aquila.

In consequence of the fame he acquired by these works, he was called to Naples by the above-mentioned king Charles, to execute others of still greater importance. The great Reclusorio, the most extensive of all the hospitals in Europe, was entrusted to this architect. It was intended for eight thousand poor, divided into four classes, that is, men, women, and male and female children ; no communication being allowed between them. Attached to this hospital was a vast public church, similarly divided. The conveniences for the labourers, and the number of refectories, courts, porticoes, offices, and dwellings for the servants and ministers, are immense. When it will be completed, it is impossible to conjecture ; many years have already been spent on it. A much shorter time and less expenditure would have sufficed to relieve every poor person throughout the fruitful kingdom of Naples. It is commonly the case, that those for whom hospitals are endowed, are not those who derive the most benefit from them. But this is the business of the government, not of the architect.

Fuga also built at Naples the cemetery for the hospital degli Incurabili, a short distance from the city in the place denominated “ *il Tredice*,” with three hundred and sixty-eight places of sepulture, and a church and residence for the priest. He also designed a palace for the duke Giordani, opposite Spedaletto, and near that another, of a prodigious size, for the prince Caramanica, and a consi-

derable villa for the prince de Jaci, in the delightful situation of Resina, near to Portici.

He commenced, by order of the king, an extensive building in the sea town, near the Ponte della Maddalena, to contain a number of magazines for the public granaries, arsenals for the artillery, and buildings for cordage ; these three grand divisions are all under the same roof.

He made several designs and models for the restoration of the cathedral at Palermo.

A number of other works for the court, and for individuals, have been executed by this indefatigable architect. At eighty years of age, he possessed that youthful vigour which results from regular and moral conduct, cheered and enlivened by application and industry ; qualities which will ever render their possessor happy and respected. He was truly an admirable architect ; understanding two of the most important parts of his profession, solidity and arrangement. His humility was the result of a perfect acquaintance with the difficulties of his art. He was a man of distinguished merit, and deserving the good opinion of all.

CONTE ENEA ARNALDI, OF VICENZA,

(Born 1716.)

WHOEVER is desirous of perusing the architectural theory of this nobleman, will find it in his works, one entitled, "An Idea for a Theatre resembling the Ancient in its Principal Parts, and accommodated to the Use of the Moderns : with two Discourses ; one on Theatres in general, with regard to the Exterior only ; the other on the Soffit of the Olympic Theatre at Vicenza." Vicenza, in 4to, 1762.

His second work is on ancient basilicas, and especially on that of Vicenza, with the addition of a court of justice ; the invention of the author. Vicenza, in 4to, 1767.

But the architectural merit of the count Arnaldi, is not confined either to sterile theory or laborious erudition : truly Palladian in his practice, he had, by a decree of the council of Vicenza, the superintendence of the restoration of the palace of Reason, which office he exercised in the manner that might be expected from a nobleman who, from his earliest infancy, devoted himself to useful studies.

NICCOLO GASPARO PAOLETTI

Was commissioned to restore the palace of the imperial villa of Poggio, near Florence ; it was necessary to dismantle an arched roof 22 feet long and 12 feet wide ; but being ornamented with paintings by Matteo Rosselli, the grand duke, Peter Leopold of Austria, would not consent to its destruction. The architect therefore proposed to remove the roof entire ; and having explained his intended proceedings, the sovereign immediately gave the order for its execution ; notwithstanding the objections offered by many to its possible accomplishment. The architect executed it in the following manner : he passed through the walls a number of beams to rest upon the impost to support the roof, which were placed about a foot and a half distant from each other, and from their internal extremities were raised as many perpendicular wooden centres, or frames, along the concavity, and between the frames and the roof was a layer of paper, near the paintings ; a number of small pieces of wood, with listels and wedges were added, to unite the roof with the

centres; the more effectually to do this, in the intermediate corners were three spurs, firmly fixed.

The concave of the roof being thus supported, the flanks or lateral walls were taken away; and the whole roof, being firmly bound together, suffered no injury in its removal to its new situation, where it was placed 13th April, 1773, under the direction of the architect, and in presence of the before-mentioned sovereign, who presented the architect with 100 gold sequines, and distributed the same sum to the workmen.

BERNARDO SQUARCINO, OF PADOVA,

BUILT the cupola of the cathedral of his native town, which is considered one of the most ancient churches of Padova; it was rebuilt by Macolo in the fourteenth century; again restored by Sansovino in the Composite order, and subsequently altered by Almerico, a Patavian architect, and others. The mechanical knowledge shewn in this cupola does honour to Squarcino, who commenced it in 1756. It is placed on four large arches, set into the massive walls, which by this means receive the whole weight, without adding to that of the roof or to the pier of the naves.

IGNAZIO VINCENZO PATERNO CASTELLO.

PRINCE OF BISCARI.

THIS Sicilian prince gave a noble example of the use of riches. He constructed, at his own expense, and from his

own design, a bridge of thirty-one arches, and 1450 feet long, over the Simeto, the largest river in Sicily, some miles distant from Catania. The widest arch which crosses the river is pointed ; its span is 88 feet, so lofty that it equals the opposite heights. Over this bridge is an aqueduct, the arches of which correspond in their arrangement with those of the bridge, and extend on each side 2700 feet beyond it. The greatest height of this work is 120 feet. It was begun in 1765, and finished in 1777. It is not only a convenient road for passengers, but also useful as a conduit for the waters which irrigate the adjacent lands. The government judged wisely, in confiding to this estimable nobleman, the superintendence of the bridges, streets, and other works of public utility.

ABATE DON DOMENICO CERATI, OF VICENZA,

FROM his earliest youth was attached to the study of civil and military architecture, and succeeded so well, that he was considered capable of filling the professor's chair of civil architecture, then established at Padova. His duty was to instruct the artists in every species of drawing or design : he conveyed his instructions with great ardour and facility, and had the satisfaction of finding his efforts generally crowned with the most complete success.

The observatory of Padova was ingeniously erected by this architect on the ancient tower, formerly rendered horrible by the cruelties of Ezzelino. This building surpasses the most renowned of the same kind in Europe, and is furnished with the best instruments, though not made in Italy.

Cerati directed the magnificent building of the hospital of Padova, where the first Jesuits established themselves. The embellishments to the Prato della Valle were from

his designs and under his directions; it is reduced to a spacious ellipsis, surrounded by a canal: both the parapets are adorned with statues. The entrance to the piazza is by four handsome stone bridges; the former is raised to avoid inundations, and under the semicircular loggia are shops: in the centre of this piazza is either a group of statues or an obelisk.

There are certain edifices at Padova considered Palladian; they are not such, but certainly possess some merit, as, the palace of the count Abriani, with a magnificent hall; of the count Aldrighetti, having a rustic basement, an Ionic order, and an attic; of Molino, small but well arranged. The Certosa is also attributed to Palladio, but was erected by Andrea della Valle, of Padova. The church del Torresino is by the count Girolamo Frigimelica, that of Santa Rosa by Giovanni Gloria, and that of Santa Lucia by Santi Rennato: all remarkable buildings, and by architects of Padova. Viola Zannini, author of a learned book on architecture, and architect of the Cumano palace at Scalona, yet unfinished, was also a native of this city. The great gate of the Mantuan garden, now the Venazza, is a work worthy of observation: its form is that of a triumphal arch, and was designed by Ammanati; by whom also was the Hercules, 25 feet high, in the court of this palace, and the Mantuan Mausoleum in the neighbouring church of the hermits.

OTTAVIO BERTOTTI SCAMOZZI, OF VICENZA,

(Born 1726.)

THAT genius of Vicenza, Scamozzi, not having any near relations, left his property to be enjoyed during life by whoever should deservedly rank as the first architect in his

native city, with the obligation of assuming his name. Thus Bertotti became also Scamozzi by the judgment of the testamentary executors, the marquises Capra, noblemen well calculated to decide such a point.

But Scamozzi never anticipated that his successor would render himself most famous by celebrating the glory of Palladio, which master was Bertotti's principal study; nor could he better employ his talents or the revenues of Scamozzi. After Bertotti had examined, compared, and measured the works of Palladio, separating those which are only said to be by that great man, he published a beautiful edition of them, which does honour to the artists of Vicenza, and to all Italy.

During the progress of this work, our architect attended to several buildings in Vicenza and the provinces, much to the satisfaction of his patrons, and of all who saw them. At Castel-Franco in Trevigiana, he executed a gallery for the cardinal Giovanni Cornaro, and a dormitory for strangers annexed to it.

He also constructed, at Scantripo, in the Vicenza territory, a palace for the counts Trissini, and another with a beautiful loggia at Alpiero, for the counts of Schio; also a house with a loggia, for the Franciscans in Arcugnano.

OTTONE CALDERARI, A NOBLEMAN OF VICENZA,

(Born 1730.)

Was from a child attached to the science of architecture; he studied from the best masters, and examined the most approved models, both ancient and modern. He adapted the solidity, decorations, and majesty of Palladio to our present internal arrangements. The purity of his taste, and his knowledge of the art of building, so raised his

reputation, that a number of noblemen erected edifices from his designs.

For the noble Sebastian Anti Sola the signor Calderari began, 1772, a house at Vicenza, near to the theatre of the Graces; it is distant about a mile from the city, and commands the beautiful view of the Campo Marzo. The façade towards the city, and opposite the street, is entirely rustic, with four Ionic columns in the centre, placed on a stone plinth sufficiently high, with windows to light the story beneath; in the centre intercolumniation is a rectangular door, the ascent to which is by a number of steps, and above the four columns is a pediment. The other façade, looking towards the Campo Marzo, has a loggia of three intercolumniations in the centre, and six double Ionic columns at the angles, which support their pediment; the windows have also pediments. From the sides of this house are steps conducting into two gardens, with an orangery in each, resting on the walls of the city. At the upper part of these gardens are, on one side the mews, coach-house, and dwellings for the domestics; and on the other are disposed fruits and flowers, and the coverings for the orangeries. From the level of the gardens to that of the stables is a descent of fifteen steps, and in the front of these buildings, which are exactly uniform, is a court, a botanical garden, and in the centre an aromatic garden. From the level of this to the kitchen garden are two flights of thirty-nine steps, and on the same level with this are the subterraneous passages.

In 1773 the signor Calderari commenced a house for the nobleman Bonini in the Strada di Porta Nuova, at Vicenza. The façade towards the principal street is finished, and has a portico of five intercolumniations and eight Doric columns, doubled at the angles. Above are as many Ionic semi-columns, with pedestals equal in height with the parapet of the windows, which have triangular and curved pediments; the termination is an attic, the

height of the smaller rooms. The other side of the building, facing another street, is more extended, but less ornamented.

The edifice of the signor Carlo Cordellina, in Vicenza, was begun in 1775, and forms a considerable façade towards the Strada Riale. The first story of the front is adorned with ten Doric semi-columns, and windows of rustic work; the second is Ionic, without pedestals: here the windows are flanked by small Composite pilasters placed on the parapets, and have curved and angular pediments; the third is an attic, the first story is vaulted.

In the Villa di Vivaro, on a spacious plain, five miles distant from Vicenza, the counts di Porto began a building, 1778, of some extent, with adjacent gardens, orangeries, courts, and rural dwellings, the whole enclosed by large fishponds. The rural habitations were designed some years back by the count Giulio Porto. The first story is a basement, from thence is an ascent by steps to the second, which has a loggia of three intercolumniations in the centre, and six columns supporting a pediment: the third story consists of chambers for the family. There are thirty-four rooms, two halls, a vestibule, a loggia, and the external and internal staircases. The first and second stories are vaulted: there are two porticoes, each of five intercolumniations, and eight Doric columns; one of these leads to the rural dwellings, the other to the orangery, at the end of which is a church, finished in 1775. Its interior width is 24 Vicenza feet, and its length 36, ornamented with Corinthian pilasters, placed on a pedestal as high as the table of the altar, and supporting the roof. In the interpilasters are six niches with statues, and stone bas-reliefs above. The altar and table are between two Corinthian columns, at the back of which are two pilasters, and a pediment above. The light is admitted by three large semicircular windows, which follow the curve of the vault. On one side is the sacristy, on the other a

tribune or gallery for the use of the family ; both these places are vaulted. The façade has four Corinthian columns, with a pediment ; the plinth is even with the pavement of the church, the ascent to which is by a number of steps : there are four statues in the niches, and a door ornamented with bas-reliefs above. The façade of the tribune and sacristy are of less height, and have a half pediment, which flanks the church ; each are ornamented with a niche for statues.

The idea of constructing the temple of Sant' Orso, at the foot of the Monte Summano, is one which would have done honour to Palladio, as it has to the signor Calderari, who, in consequence of the public applause bestowed on it, had it engraved and published in 1777.

Thus Vicenza is distinguished among the most magnificent cities for the elegance of her architecture, established by Palladio, and which has since continued to be encouraged ; and if she has endured a century of torpor, she has only risen more vigorous, through the exertions of the Vicenzian lords, who emulated each other in increasing her dignity and importance. Among the most accomplished noblemen was the count Francisco di San Giovanni, whose architectural taste and knowledge supplied the accounts of the buildings in the Venetian states, comprised in this work.

FRANCESCO MARIA PRETI,

OF CASTEL FRANCO, IN TRIVIGIANO,

(Born 1701, died 1774,)

RECEIVED a noble education, suited to his rank, in the college of Brescia, where he pursued his studies. Soon

after his return to his native city, it was found necessary to rebuild the church of S. Liberale, which is the cathedral of Castel Franco. At the suggestion of the count Giovanni Rizzetti, as well as that of the count Giacomo Riccati, from whom Preti received much important information, he applied himself to architecture with such ardour, that in a short time he was enabled to make the design for the new church, which received general approbation. Its form is that of a Latin cross, with a single nave, and three recessed chapels. In the centre of the cross rises a magnificent cupola, resting on an octagon, with a balustrade above; the drum is ornamented with Corinthian pilasters, windows, and niches. It has a tribune, and a choir of a circular form, with two sacristies. The Ionic order, with a pedestal and small attic, prevails throughout the whole church. The façade is of a single Doric order, on pedestals; the door has a pediment above it; and the whole is well arranged. This church was erected with some alterations, and without an external vestibule, much to the displeasure of Preti, in order to lessen the expense. The design, however, for the vestibule is given with that of the church, which the architect, for his own justification, had engraved and printed in the Venetian edition of his works.

From this period, his whole occupation was in architecture, and whatever is connected with it. He studied all the ancient and modern writers, applied himself to music, went to Padova to pursue a course of studies, and endeavoured to acquire every species of information which may be gleaned from those sources which can assist civil and military architecture. He proposed to collect all the maxims and rules of the best authors, adding his own reflections, to fix the harmonic medium of height, to supply what was wanting in theory on that subject, and to write a complete treatise on it. He also intended to explain all that has been reduced into practice in a series of designs, to point out common errors, and the method of preserving

unity, harmony, elegance, majesty, and solidity, both in appearance and reality.

The most laborious and tedious part of this work was drawing the designs, the great number required must have occupied him several years. He determined, however, to finish them, with the intention of extending his scientific treatise at some future period, materials for which, his previous assiduity of study had enabled him to collect, and thus rendered the task easy and delightful.

But a variety of occupations and frequent attacks of the gout, added to a delicate state of health, and subsequent loss of sight, prevented his finishing this treatise.

From a number of writings which he left, the "*Elementi di Architettura*" were selected and printed at Venice six years after his death, viz. in 1780. This work is divided into twenty-four chapters; the first twelve treat of the orders, the attic, the diminution of the columns, on the orders one above the other, plans, heights, cornices of rooms, staircases, vestibules, loggiæ, doors, windows, and altars. The remaining twelve are on projections, combinations, façades, optical effects, roofs, cupolas, internal ornaments, and colours; the origin of the barbarous Greek orders, and Gothic construction, magnificence, and unity. To speak candidly, some of these chapters are treated very superficially; as that on plans, roofs, and cupolas, and greater perspicuity was requisite in those on vestibules and loggiæ.

All the drawings of this architect, and in particular those of the palaces, from the third to the twenty-ninth, and of the churches, from one to seventeen naves, which he had intended to publish and display in his treatise, are still unprinted.

Among the number were some architectural difficulties, which were solved by him with great facility. As, a city ornamented with edifices of various dimensions, interspersed with houses, shops, dwellings for artisans, and a

temple at the extremity, a royal palace, with nine courts. Another, with passages in right and diagonal lines, convenient adjacent buildings, and covered ways of communication; all arranged with the greatest convenience, united to the most perfect beauty.

He made many other designs for noble and rural dwellings, additions to churches, and to other buildings already erected, never refusing his assistance when requested. Among these is preserved that for the façade of St. Guistina of Padova, with a Corinthian order on the first and second story, placed on a band or small plinth. At the same time, he made some additions and alterations, and gave this basilica more solidity and beauty.

Besides that for the church of S. Liberale already described, he made a design for a theatre erected in Castel Franco, his native town: this contains an academy, and is arranged both for morning and evening representations. Its plan is a rectangular parallelogram, on one side of which, besides the façade and vestibule, are three ranges of boxes, disposed in a semicircle; the staircases in the angle; on the opposite side, is a place for the scenery, with other staircases; at the sides are two internal loggiæ with arches, and windows to receive the light from the exterior, composed of three intercolumniations, with Corinthian columns, on a simple plinth, which runs all round the theatre, and serves as it were to support the soffit. The above-mentioned columns, with a pedestal forming an ascent, are planted on a rustic basement, in which are three doors, simply ornamented, and an entrance to the platea of the theatre. The façade is of the Corinthian order, with an attic above in the centre, all of rustic work, having two smaller buildings at the flanks, for the general convenience of the theatre. The entrance to the vestibule is by an arch, the impost of which divides the larger windows from the lesser. The plan,

façade, and details of this theatre were engraved and printed, and added to the "Elements," which we have before named.

Besides other buildings, there are many parochial churches in the neighbourhood, of his design; as that of Valla, in the Ionic order, of one nave; that of Salvatronda, in the Doric order, in the form a Greek cross; that of Caselle, in the Corinthian; and that of Tombolo, also Corinthian. The façade of the latter has a majestic vestibule, corresponding exactly with the general design; but the interior is defective.

Il Preti was an architect of singular abilities. His works are simple, majestic, and correct. He always practised his art like a man nobly born, and really from a love of it, never receiving the least recompense, except the gratitude of those who requested his advice. He was a man of honour and probity, the friend of every professor of art, liberal and sincere in conversation, fond of music, and desirous of seeing every manufacture carried to the highest perfection. He was generally esteemed by the most illustrious men, for his birth, his knowledge of his own and the more northern countries, particularly of England, by whose natives he was constantly visited, and whom he ever entertained with pleasure.

GIOVANNI MIAZZI, DI BASSANO,

(Born 1699,)

THE son of Antonio, an excellent carpenter, and nephew, on his mother's side, of Francesco Trivellini, a painter of

no mean reputation. He was brought up to his father's business, which he followed for many years, and soon excelled his parental instructor. He evinced an inclination for architecture at a very early period, and at fourteen years of age was observed endeavouring to discover the proportions of the height and sizes of columns. A stone-cutter, pleased with his ingenuity, lent him the "Elements of Geometry," by Serlio, and afterwards those of Vignola. From these he proceeded to the reading of Scamozzi, Palladio, and other authors, by means of which he made all the progress that could be expected by a young man destitute of a master, and all other auxiliaries necessary to form an architect. Little skilled as he was, he built a small theatre in his native town, a casino in Rossano for the signori Caffi of Bassano, and the church of La Trinita in the Borgo of Angarano.

It was not until he had attained the age of forty, that he had an opportunity of correcting and rectifying the ideas which he had acquired by himself, and of attaining perfection in architecture, which he at length did, through the suggestions of that great architect, Preti. From this period he placed himself entirely under his direction, and adopted his plans and style, especially the proportions of the harmonic medium in the height of buildings, which he afterwards always used in works of his own invention.

After receiving this instruction, Miazzi was employed in the rebuilding of the church of S. Giambatista di Bassano; an undertaking by no means easy to complete with success, on account of its confined situation, which did not admit of any enlargement. The public piazza, on one of the larger sides, the monastery of the monks, and the habitation of the lent preacher, on the opposite one, the chapel of the Sacrament, which was used as a tribune to the old church, and to be preserved on account of its beautiful stuccoes and fresco paintings of the celebrated

Milanese artists, Abbondio, Stazio, and Carpofozo Mazzetti, on the lesser side, and the choir of the monks in the corresponding one, gave no room for extension on either side. Thus the new church was to rise on the foundations and walls of the old one.

Our architect, therefore, gave the plan the form of a portion of an ellipsis. He then found the harmonic medium* between the length and width, and thus discovered the height of the vacuum: he determined on using the Ionic order, with a pedestal and an attic above, on which was placed the great arch without a key-stone, which corresponds with the proportions of the other arches of the order. The church was divided into eight arches, and as many intercolumniations, comprehending the two large arches situated in the centre of the larger sides. Under the impost of one of these, looking towards the piazza, is the principal door, ornamented with Corinthian columns, which supports the entablature. In the great arch opposite to this is the chapel of St. Paul, which is considered the principal, and has a magnificent altar, designed by Miazzi. It is to be observed, that the impost of the arches of the order serve as an entablature to the above altar, and to the Corinthian order of the principal door, according to the method of Il Preti. In the eight

* Vitruvius having recommended the architect to acquire some knowledge of music, many have supposed he intended to infer that there was a union between the proportions of that science and architecture: but had they thoroughly studied the passage in question, they would have found also his reasons for that recommendation, viz. that the architect should know how to arrange an orchestra, or other buildings where sound is important. For want of this attention, many, led away by a wild imagination, have endeavoured to erect harmonic structures, by the introduction of what they term musical proportions. When the plan, elevation, arrangement, and ornaments of an edifice form one grand whole, then, and then only, can the epithet harmonious be applied. Such a whole is not produced by eighths, fifths, and thirds, but by laborious study, matured by observation and reflection.

intercolumniations between the arches, under the cimasia of the pedestals, are the lesser doors, and the confessionals. In fact, notwithstanding all the obstacles before named, throughout the whole of this church, we find the laws of unity, simplicity, and ornament, properly observed.

The façade, which was to occupy not only the principal side of the church towards the piazza, but also that of the sacristy on one part, and the choir of the monks on the other, which additions were extremely irregular and dissimilar both in their extent and height, obliged Miazzi to study the means of covering all these errors, and producing an effect decorative not only to the church but to the piazza; in this he succeeded to admiration, uniting the principal and second order together. The principal order, which is in the centre, is Composite, with a pedestal, and a keyed arch, flanked by two intercolumniations, and in this is the great door. The sides of the façade are occupied by the secondary order, which is Corinthian, with the columns on the ground, the same arrangement being observed as in the principal. This order, with its entablature, forms the impost of the large arch. The principal order terminates in an angular pediment, with three pinnacles and statues; and the second in an attic, with statues. This façade is not yet finished; but in that already done there is a perfect unity, simplicity, and magnificence.

The archipresbyterial and collegiate church of Schio was designed by him, and approved by the Machese Poleni, except the presbytery, which is by another architect. The beautiful one of Valdagno, of the Corinthian order, is also his; as well as the parochial church of S. Vito, a village three miles from Schio, and that of Simonzo; the little church of the asylum for girls at Bassano; and others in the surrounding country. Finally, the conventual fathers of Monte Gargano, in Puglia, applied to Miazzi

for a design to rebuild their church, which was executed, and generally approved.

But Miazzi distinguished himself most conspicuously in the palace which he built for the house of Spineda, at Venegazzu in the Trivigiano. Its aspect is wonderfully harmonious and agreeable, from the connexion of the first order with the second in different levels, and continued along the other buildings right and left of the palace, vulgarly called Barchessi; one of which terminates with an elegant chapel, the other with a green berceau. But the harmony resulting from so beautiful a union has been entirely spoiled by the demolition of the chapel, and the arches between the palace and the lateral buildings, and consequently destroyed that unity so agreeable in all buildings.

Under the direction of Miazzi was erected the beautiful theatre of Treviso, designed by the celebrated Bibiena; but the internal arrangements, the façade, and vestibule, are by the former, which correspond exactly with that elegance and correctness which predominate throughout the whole interior building.

This architect has the merit of banishing the Borromean taste from his native country, introduced into it by Bernardo Tabacco, particularly used in altars, and of practising the better style of the Romans. At eighty years of age, his mind and body were equally vigorous; and he had the consolation of seeing a successor to his abilities and profession in his son Antonio, who, first instructed by him, was, like his father, for some time, the disciple and auxiliary of Preti.

HENRY FLITCROFT

ERECTED the church of St. Giles in the Fields, London, 1733; it is constructed with Portland stone, and has a vaulted crypt. The interior is decorated with Ionic columns resting on stone piers. The exterior has a rusticated basement, and the windows of the galleries have semicircular heads; and the whole is surmounted by a modillion cornice. The steeple, 165 feet high, consists of a square tower, the upper part decorated with Doric pilasters: above, it assumes an octangular figure, and is ornamented with three-quarter Ionic columns, supporting a balustrade and vases; over this is an octangular spire.

He also erected the church of St. Olave, Southwark, and was buried in the churchyard at Teddington.

WILLIAM KENT

(Born 1685, died 1748.)

WAS born in Yorkshire, and apprenticed to a coach painter: his genius was early discovered by some gentlemen in the neighbourhood, who raised a subscription for the purpose of defraying his expenses to Rome, whither he accompanied Mr. Talman in 1710. There he studied under cavalier Luti. His principal employment, on his return to England, was decorative painting and gardening.

He was patronised by Lord Burlington; and among his architectural works may be reckoned the pile of

buildings at Westminster, which contain the courts of law; Mr. Pelham's house at Esher; a staircase at a house in Berkeley square, then occupied by lady Isabella Finch; and the large room at Mr. Pelham's in Arlington-street; the earl of Leicester's house at Holkham, in Norfolk, which was engraved and published in 1761, by Mr. Brettingham, architect, who had not the candour to admit that it was erected after a design by Kent.

He laid out the royal gardens at Richmond, and built the barracks called the Horseguards, St. James's Park.

COLIN CAMPBELL

(Died 1734.)

DESIGNED and erected Wanstead house, on Epping forest, which no longer remains. This noble front extended 260 feet; the basement was well proportioned, and 15 feet in height. The principal story was lighted by well-arranged windows, alternately decorated with triangular and circular pediments. The centre had a portico of eight Corinthian columns, 3 feet in diameter, and a balustrade along the whole front. The interior was well distributed: the ground floor contained a large hall, 51 feet by 36, and 30 feet high; a saloon, a cube of 30 feet; two apartments 34 by 24 feet; two 24 feet square; four 24 by 20 feet; two 24 feet by 15; four 15 by 12 feet; a library 34 by 24 feet, and a chapel of the same dimensions. Many of these rooms were thoroughfares, particularly the library, which could not be reached without passing through the other rooms. He erected also a house at Mereworth in Kent, in imitation of the rotunda at Vicenza, built by Palladio; and was made surveyor of the works at Greenwich Hospital. He published, in folio, three vo-

lumes of the *Vitruvius Britannicus*; the first of which appeared in 1715, the second in 1717, the third in 1725: two other volumes were added in 1767 and 1771, by Woolfe and Gandon, both eminent architects.

The former built Heythrop for the earl of Shrewsbury; and Gandon, a pupil of Sir W. Chambers, gave a most correct and elegant design for the county hall at Nottingham: he also was much employed at Dublin: the parliament house, four courts and other public buildings in that city, reflect great credit on his talents. In 1802, a new *Vitruvius Britannicus*, in folio, was published by Richardson.

JOHN JAMES

Was employed by the duke of Chandos to erect his house at Cannons, where he neither displayed taste nor science. He erected the church at Greenwich in Kent, and a noble mansion at Blackheath for Sir Gregory Page, which had the same fate as Wanstead house; both were raised to perpetuate the names of the families to whom they belonged, and each in their turn were lotted by the auctioneer, and brought to the hammer. James also erected St. George's church, Hanover Square; the west front of which consists of six Corinthian columns, forming a handsome portico, crowned by a pediment, over which is a steeple of an octangular form. The body of the church at Twickenham is his work; as is also that of St. Luke, Old Street Road, which has a fluted obelisk for a steeple.

JACQUES GERMAIN SOUFFLOT,

(Born 1714, died 1780.)

IF French architecture has recovered any part of its former lustre, it is owing to the works and zeal of Soufflot. He was born at Irancy near Auxerre, in the year 1714: his father was a barrister, who sent him at an early age to Paris, that he might follow the same profession; but the decided taste which the young man evinced for architecture, induced him to alter his determination. He was therefore taught mathematics and drawing, in which he made great progress, and at length travelled to Italy. His assiduity and talents recommended him to the notice of the duke of St. Aignan, ambassador of France to the holy see, who procured him admission among the numerous students sent by his majesty to Rome. His rising merit soon reached France. Several new buildings being projected in the town of Lyons, the commissioners consulted the directors of the French academy at Rome, on the choice of an architect, and Soufflot was immediately fixed on. He accordingly commenced the Hotel Dieu, the Exchange, the Concert-room, and the Theatre at Lyons. While thus employed, he visited Paris; and the marquis de Marigny, recently appointed director of the royal buildings, wished the architect to accompany him to Italy: he commenced the journey, but the state of his health obliged him to return to Lyons: and on the marquis resuming his office at Paris, he sent for Soufflot, and made him comptroller at Marly. He then succeeded in the same situation on the death of d'Isle, in Paris. About this time, a favourable opportunity occurred for the development of his talents—the rebuilding of the church at St. Genéviève.

the foundation of which he laid in 1756. In the following year, he received the order of St. Michel, and was nominated commissioner and general superintendent of the public buildings. Envy, however, endeavoured to destroy the fame of Soufflot; it was intimated that the foundations were not sufficiently strong to support the dome: this opinion gained credit with the public, notwithstanding the calculations made to the contrary, by M. Ganthey, engineer to the bridges and ways, and M. l'Abbé Bossut, of the Academy of Sciences. The architect, sure of silencing vulgar clamour, would not condescend by any written exposition, to set the public mind at rest, and he died, 30th of August, 1780, before the completion of the work.

The year after his death, M. Dumont, professor of architecture, raised a monument to his friend, by the publication of a number of drawings, in a work entitled, “*Élévations et Coupes de quelques Edifices de France et d'Italie, dessinées par feu M. Soufflot, architecte du roi, et gravées par ses ordres.*”

Soufflot also erected the orangery of the chateau of Menars: this building possesses extreme simplicity, and communicates to the chateau by means of a saloon.

The treasury and grand sacristy of Notre Dame were rebuilt in 1756, after his designs.

The chateau d'Eau, in the rue l'Arbre-sec, of the rustic order.

The residence of the duc de Lauzun on the borders of the Brenta, near Venice, is his work.

The church of St. Genéviève is preceded by a vast porch, consisting of twenty-two Corinthian columns, six feet in diameter, and 60 feet in height; over the six in advance, is a pediment: the plan of the church is a Greek cross, 330 feet long, and 252 wide; in the centre is the dome, supported by four triangular piers: it is 86 feet in diameter, in the clear inside.

SIR ROBERT TAYLOR

(Born 1714, died Sep. 27, 1788,)

WAS the son of a celebrated mason, received an ordinary education, and at an early age visited Rome, for the purpose of advancing himself in his profession, though with very scanty means of subsistence. After a short residence in that city, he heard of his father being at the point of death, and immediately, with filial anxiety, took his departure for England :—the continent being involved in a protracted war, he found it difficult to travel for want of proper passports; he assumed the dress of a Franciscan friar; but he did not arrive until his father had breathed his last. Being obliged to depend on his own exertions, he commenced business as a statuary; and his first work was Cornwall's monument; but that which ranks highest among his performances of this nature, is Guest's, near the north door of Westminster Abbey. He executed the Britannia at the Bank, and the bas-relief in the pediment of the Mansion House. After these performances, he devoted himself to architecture. He designed and erected a villa at Richmond, for Sir Charles Asgill; a dwelling-house for Sir P. Taylor, at Purbrook, near Portsdown Hill; some magnificent additions to the Bank; the duke of Grafton's house, Piccadilly; a mansion for Lord Howe, in Herts; some additions to Lord Radnor's, in Wilts; some alterations to Lord Clarendon's, in Herts; Lincoln's Inn Stone Buildings; Ely House, Dover Street; Sir John Boyd's, at Danson; the bridge at Henley-upon-Thames, of five arches; and altered, in 1758, London Bridge, in conjunction with Mr. Dance; a house for Mr. Gower, near the South Sea House; and Lord Grimston's at

Gorhambury. He had for some time a seat at the Board of Works, was surveyor to the Admiralty and Foundling Hospital, and succeeded the Athenian Stuart at Greenwich ; these, with surveyorships and agencies out of number, employed his attention, gave him reputation, and enabled him to leave property behind him to the amount of £180,000.

SIR WILLIAM CHAMBERS

(Born 1725, died March 8, 1796,)

WAS the son of a merchant, originally of Rippon, in Yorkshire, but who settled at Stockholm, for the purpose of recovering a large sum of money, advanced by some part of his family to the king of Sweden. During this period, the subject of this memoir was born: his first occupation was that of a supercargo to the East Indies, and having a considerable taste for drawing, he made several sketches of the costume and buildings in China, which were afterwards published in England. His mind, however, being always more inclined to the study of the arts, he relinquished commercial pursuits, made a journey to Italy, and devoted himself to architecture. The best masters attracted his attention, and he had perseverance and talent to pursue his studies upon the models they had left. After a residence at the principal cities on the continent, he settled in London, and was introduced by Mr. John Carr, of York, to the earl of Bute, as qualified to instruct the prince, afterwards George III., in the rudiments of architecture, who became so pleased with his tutor, that on his accession to the crown he appointed him his chief architect. His first employment was upon the residence of the dowager princess at Kew, where he laid

out the grounds, and decorated them with many temples and buildings in a variety of styles ; some resembling those of Asia, and others after more classic models : he was then appointed comptroller to the Board of Works, and afterwards surveyor-general ; he also made designs for the new bridge at Blackfriars, but these being deemed too magnificent, Mr. Mylne's were adopted. After this he was nominated treasurer to the Royal Academy, then just instituted ; in 1771 he was presented to the king of Sweden, who conferred on him the order of the Polar Star. Lord Clive's villa, at Claremont, built by Mr. Brown, was at first designed by him ; and the rejection of these designs by his lordship, gave rise to a difference between the two architects, which was never entirely reconciled. At Rochampton, he built a villa for the earl of Besborough, the portico of which has been much admired. He designed a superb mansion for lord Abercorn, at Duddingston, near Edinburgh ; he was employed by the duke of Bedford, lord viscount Middleton, earl Gower, and lord Milbourn : for the two last, he built mansions at Whitehall and Piccadilly. He made some designs for a church at Mary-le-bone, which were not executed. He was employed by the earl of Pembroke at Wilton ; at Blenheim he made several additions, without altering the character of the original structure ; he erected a market house at Woodstock, admirable for its simplicity and appropriate character. He visited Ireland, and designed and built a beautiful casino at Marino, for Lord Claremont. After this he designed the new buildings at Somerset House, which was commenced in 1776, and covers a space of 500 feet in depth, and nearly 800 in width : the interior is occupied by a quadrangular court 343 feet long, and 210 wide, with a street, or wide-way, on each side, parallel with it, 400 feet in length and 60 in breadth ; these terminate in a terrace on the banks of the Thames 50 feet in width, which is raised 50 feet above the bed of the river, and

occupies the whole length of the façade towards the water. The Strand front is only 135 feet long, and has a rustic basement supporting ten Corinthian columns on pedestals, crowned by an attic extending over the three central intercolumniations, with a balustrade on each side. The order comprehends two floors; nine large arches compose the basement; the three centre ones are open, and form the entrance to the large court: those on each side are filled with windows of the Doric order, decorated with pilasters, entablatures, and pediments. The key-stones of the arches are carved in alto-relievo, with nine colossal masks, representing the Ocean and the eight chief Rivers of Great Britain. The three open arches already mentioned, lead to a vestibule, which unites the Strand with the large quadrangular court, and serves as the general access to the whole edifice, more particularly to that part of the building assigned to the Royal Academy and the Royal and Antiquarian Societies; the entrances to which are within the vestibule, which is decorated with columns of the Doric order, the entablature of which supports a vaulted ceiling. The front of this pile of building, towards the quadrangle, is 200 feet in extent, being much more than that of the one towards the Strand. The style of its decoration, however, corresponds: the principal variation is in the use of pilasters instead of columns, and in the doors and windows. The front next the Thames is ornamented in a similar manner to that already described. The terrace was originally designed to have extended eleven hundred feet. It is supported by a lofty arcade, with columns of the Tuscan order.

In the year 1759, he published a Treatise on the Decorative Part of Civil Architecture; a work exceedingly useful, and highly valued for the research, judgment, and fine taste, which it exemplifies. In 1772, appeared from his pen a Dissertation on Oriental Gardening; in which he severely satirises his antagonist, Mr. Brown.

JOEL JOHNSON

(Born 1721, died April 17, 1799,)

ERECTED the church at Wapping, the Magdalen and London Hospitals, the Asylum, besides many other chapels and edifices, public and private: among which may be mentioned the Shire Hall at Chelmsford, in Essex, and bridges and other works in that county.

ROBERT ADAM,

(Born 1728, died 1792.)

HE early travelled into Italy, and made accurate drawings and measurements of the once splendid palace of the emperor Dioclesian at Spalatro, in Dalmatia; these he published in 1764. He designed the Adelphi in the Strand; and, in conjunction with his two brothers, conducted the erection of them. They constitute a number of private dwellings, but are so arranged, as to give a character to the whole of a public building: the pilasters and ornaments are taken from the depraved style found in Dioclesian's palace.

He erected Keddlestone, in Derbyshire, for lord Scarsdale; Luton park in Bedfordshire, for the earl of Bute; Caenwood in Middlesex, for the earl of Mansfield; Shelburne House, London; the gateway to Sion House; and part of the Register Office, Edinburgh. In these works is introduced a delicacy of taste not practised before; and

it is only to be lamented, that too frequently his model was the degenerated architecture of the Romans. He introduced a lighter style than had been previously used ; gave his rooms a variety of forms, painted ceilings, slender mouldings, pilasters and friezes charged with grotesque stucco ornaments, with fanciful and delicate foliage ; he often transgressed the limits of propriety ; his architecture was gay, rather than chaste, and too generally encumbered with ornaments : his enrichments were sometimes rendered more absurd by painting the ground on which they were placed of a different colour.

JAMES STUART

(Born 1713, died February 2, 1788 ; aged 75 years,)

WAS the son of a Scotsman and mariner, resident in Creed Lane, Ludgate Street. His father dying when he was young, left a widow with many children, in distressed circumstances, who were supported and finally established in the world by the subject of this memoir, who was principally occupied as a painter of fans for the celebrated Goupy of the Strand. He was thus employed till 1742, when he set out for Italy, to pursue his studies as a painter, in conjunction with Mr. Revett and Mr. Gavin Hamilton. Stuart remained in Italy between six or seven years, and supported himself by the exercise of his pencil ; during which time he acquired a considerable literary knowledge, which is evident in his writings. In 1750, in conjunction with Mr. Revett, he left for Greece, first visiting Venice and Pola. At Athens he pursued his studies with unremitting attention, measuring for the first time the splendid monuments of that city, and returned to England in 1755. These drawings were published at the beginning of the

year 1762, under the title of “ Antiquities of Athens,” and reflect the highest honour on our artist as well as his colleague. They met with approbation from every quarter; and our author was surnamed the *Athenian*, was chosen a member of the Society of Antiquaries, and of the Dilettanti Society: he was universally patronised, and employed. Lord Anson procured for him the place of surveyor to Greenwich Hospital.

Among his works were, lord Anson’s house in St. James’s Square; Belvidere, near Erith, Kent, the seat of lord Eardley; Mrs. Montague’s house, Portman Square; the chapel and infirmary at Greenwich Hospital; a triumphal arch, the octagon temple of the winds, and other buildings, at Shuckburgh, the seat of lord Anson in Staffordshire; and some parts of the interior of lord Spencer’s house in St. James’s Place.

NICHOLAS REVETT

(Born 1722, died 1804, aged 82 years,)

WAS the son of John Revett of Brandeston Hall, near Framlingham, Suffolk: he visited Rome in 1742, and placed himself with Il Cavalier Benefiale, a celebrated painter, to perfect himself in that art. Soon after his arrival, he became acquainted with Mr. Stuart, in company with whom he visited Athens. After his return, he was entirely taken up in preparing the drawings for the Antiquities of Athens, and of superintending other architectural works.

He designed the eastern and western porticoes at lord Despencer’s at West Wycomb; a temple at the same; the temple of Flora; and another on the island; the church at Ayot St. Lawrence, Herts, for Sir Lionel Lyde, bart.;

and the portico for the eastern front of Standlinch in Wilts, for James Dawkins, esq.

Wiley Revely, a pupil of Sir William Chambers, published the third volume of Stuart's and Revett's Athens, and was an architect of some talent; he erected the new church at Southampton, and made designs for some baths at Bath, which were, however, not executed, although well contrived and extremely elegant:—he died in 1799. A fourth volume has since been published, containing buildings, &c. not included in the other three, and edited by James Woods, esq.

JAMES WYATT,

(Born 1746, died 1813.)

HE was born at Burton, in the county of Stafford, was the son of a farmer and dealer in timber, and at an early age was introduced to lord Bagot, then about to depart for Rome, as ambassador of Great Britain at the ecclesiastical states. When he arrived at the imperial city he applied himself to the study of the ancient monuments, measuring, with great care, the buildings considered the most worthy of attention. He afterwards visited Venice, where he became a pupil of the celebrated Viscentini, an architect and painter, who directed his studies for two years. At twenty he returned to London, after being absent six years, and was first employed upon the Pantheon, in Oxford Street; the completion of which spread his fame both far and wide, and he was eagerly sought after to superintend numerous public and private buildings, in England, Ireland, and Scotland.

On the death of Sir William Chambers, he was appointed surveyor-general to the Board of Works, and erected the new military academy on Woolwich Common, in the

castellated style, and for a short time filled the chair at the Royal Academy.

Among the many buildings which he executed, are, the palace at Kew; Lee Priory, Kent; Castle Coote in Ireland, the seat of viscount Belmore, which, for grandeur of effect and judicious arrangement, deserves much commendation; the apartments are upon a moderate scale, and well disposed: the whole is after a Greek model. A seat at Bowden Park, Wiltshire, for Barnard Dickenson, esq., in the same style. A castle, in the Gothic manner, at Ashridge, in Hertfordshire, for the earl of Bridgewater; a very extensive and splendid mansion, the chapel is highly decorated, and in imitation of the florid architecture practised in the middle ages. Fonthill Abbey, Wilts, a magnificent and splendid residence, in the Gothic style, lately belonging to W. Beckford, esq.; Hanworth church; House of Lords; the restoration of Henry the Seventh's Chapel at Westminster; and a part of Windsor Castle; Bulstrode; Doddington Hall; Cashibury. At Oriel college, Oxford, he has introduced a correct Ionic, in a screen, which does not form a part of the building, as it might have done; and a beautiful Doric gateway to Canterbury court; though the columns, when compared with the Greek, appear too slender.

Mr. Wyatt was very extensively employed in repairing and restoring many Gothic cathedrals, although he has been in some instances censured for his want of correctness in paying due attention to the styles of the respective eras.

He restored the cathedral at Litchfield, and removed the separation between the Lady chapel and the choir. He likewise did the same at Salisbury, and rebuilt the nave at Hereford. In 1789 he commenced a restoration of New College chapel, Oxford. He was employed also at the colleges of Merton, Balliol, Magdalene, and All Souls, at the same place.

He died in 1813, aged sixty-seven, in consequence of the overturning of a chariot near Marlborough.

Among other architects who distinguished themselves at this time, may be mentioned Mr. John Mylne, who constructed, between 1760 and 1768, the bridge at Blackfriars, at an expense of £152,840. It is 995 feet in length, consists of nine elliptical arches, of different span. He was the first English artist who obtained a premium for art in the academy at Rome, and long held the situation of surveyor to the cathedral of St. Paul.

Holland erected the front of Carlton House, Pall Mall, and arranged the apartments in a good manner, built the Theatre at Drury Lane, afterwards destroyed by fire, and other considerable works.

Dance erected Newgate, St. Luke's Hospital for lunatics, &c., repaired Guildhall, and many other buildings belonging to the city of London.

Charles Labelye, a native of Switzerland, who died in 1762, at Paris, erected Westminster Bridge; it has thirteen large and two small semicircular arches, with fourteen intermediate piers; it is 1220 feet in length; the arches all spring about two feet below low water. It was commenced in 1738, and opened to the public in 1750.

From the foregoing accounts of the works of the most celebrated architects, an opinion may be formed upon the actual state of architecture in Europe. Two kinds have

successively been practised, the Greek and the Gothic; so opposite in their character, that no ability on the part of the architect can possibly assimilate them. Both may be traced to an early period, though the origin of neither has been satisfactorily determined.

The Gothic may be said to be in imitation of wild, luxuriant, and uncultivated nature, and beautiful in its whole. It may be employed with advantage in many situations, and for various purposes, if divested of some of its numerous and rudely formed detail.

The Greek was derived from cultivated nature, from observations made upon her most beautiful productions, by a people possessing a refined taste, and judgment to select the most fit and appropriate objects, and applying them to the art of building.

From the time of Brunelleschi, in the fifteenth century, Italy has been endeavouring to practise the art after the Greek model—one always considered the most correct, and by some perfection itself; that she has not succeeded in the Vatican, which is the *chef d'œuvre* of modern art, is decided by all who have seen and studied the pure works of the Greeks.

Italian architecture does not resemble the Grecian any more than it does the Gothic: indeed the magnificent remains in the Campo Vaccino shew us that the Romans themselves departed from the rules laid down by their great masters, to whom they were indebted for all that constituted the decorative parts of architecture—for the orders, their arrangement, and their essential members.

Since the revival of art, architecture has affected too much ornament, instead of a simplicity of manner, so much to be admired. The grand error that architects have fallen into is the introduction of so much variety, or rather redundancy. Ornament should always result from expediency, express some positive intention, and be applied sparingly. In gilding the roofs, and other parts of our

temples, we fall into the same absurdity that the Romans did in the time of Alexander Severus, who frequently repeated the saying of Persius:—

“ In sanctis quid facit aurum ?”

When Greek architecture is thoroughly understood, our edifices will not only be less expensive in their construction but more beautiful, and more creditable to the artists themselves, as well as the whole nation.

Italy may justly be said to possess not only the most sumptuous, but the most perfect buildings in Europe, or the world, and her architecture is superior to that of any other nation; but her superiority is more relative than positive. It is the superiority of those who have one eye over the totally blind. With regret it must be acknowledged, she has not, in latter days, made use of all the advantages she possesses.

Germany and the north have not hitherto made much progress in architecture.

In Asia, Africa, and Greece, the arts no longer are encouraged; there are now neither painters, sculptors, architects, orators, poets, or philosophers. The arts and sciences make the tour of the world, said the Czar Peter; but in spite of this correct observation, Grecian taste seems tardy in her movement.

France has not been what she now is above a century and a half: the multiplicity of her great men have elevated her to a degree of glory, which the most cultivated nations will find difficult to surpass; but in architectural beauty, notwithstanding her De Lorme, Mansard, Perrault, Blondel, &c., she must still labour hard to be as much admired as she is for her knowledge of arrangement and mechanics.

On comparing the edifices of France and Italy, it appears as if the architects of the two countries had derived their principles from different sources. A variety

of climate and habits necessarily produces a difference in architecture; but this ought only to be observable in the materials, in accommodation, and apertures for the introduction of light and air, in the form of the roof, or other matters connected with these points; never to the application of the orders, ornaments, the forms of doors or windows, the proportion of parts to the whole. These latter should be conformable to rule, and the same in every climate; the laws of architecture being immutable.

The French dislike monotony of effect, particularly in their large buildings. M. Blondel could not endure a design that was without projecting masses, or numberless ornaments between the windows, which he considered requisite to produce what in France is termed "movement" and "effect."

Palladio has given this to his façades by graceful forms, well-chosen situations, correct profiling of his orders and detail, and just proportions. Indeed a true brilliancy of effect is produced by an arrangement of columns, as we see them in the Pantheon, Antoninus and Faustina, and other Roman temples.

The English have always admired Italian architecture. Wren, Jones, and Burlington, have derived from that source the notions of beauty which they have given to England: The streets of London are, in general, well set out, there are a variety of spacious squares, and markets tolerably well distributed; but the best-arranged mansions are in the country, where the gardens and parks are a compendium of nature; they delight and surprise, without the least appearance of art.

On the revival of the fine arts in Italy, Spain had also her golden age, that is, a dawning of taste, which lasted from Charles IV. to Philip III. Machuca, Siloe, Otanos, Gamiel, Toledo, Cobarrubias, Bustamente, Mora, Herrera, Monegro, Navarra, Hernandez, all constructed edifices deserving admiration. There also flourished several ex-

cellent statuaries and celebrated painters; among these was Velasquez, admirable in his management of the *chiaro oscuro* and *aërial perspective*: Rivera's style was energetic, and his imitation of nature accurate; with a freedom of pencilling he expressed the peculiarities of the body, such as the skin and wrinkles, with great truth: Murillo, sometimes powerful and natural, at others soft and graceful:—but every thing afterwards declined, so that deformity usurped the place of beauty, and a general confusion ensued. At length Charles III. led the arts into their proper path, by establishing the academy of San Fernando; and it was wisely ordered by the count of Florida Blanca, that no one should build without the approbation and examination of this academy. Academicians and architects of merit now flourish; among which Sabbatini and others have left many proofs of their ability. Above all these, Villaneuva shone conspicuously; the purity of his taste was founded on Grecian simplicity; and the then prince of Asturias, and the royal Infantas, his brothers, understood the art of design perfectly, and were enabled to form a correct judgment on it. If courts, noblemen, and philosophers, do not understand art, neither painting, sculpture, or architecture, can flourish:—to direct any subject properly, we must first study the principles of it ourselves.

· END OF THE SECOND VOLUME.

INDEX.

NAMES OF THE ARCHITECTS CONTAINED IN THE TWO VOLUMES, ARRANGED ALPHABETICALLY.

	VOL. <u>L.</u>	<u>II.</u>
	Pages	Pages
A.		
ADAM, Robert	<u>392</u>	
Ætherius	<u>116</u>	
Agamedes.....	<u>9</u>	
Agaptos	<u>33</u>	
Agnolo, Baccio.....	<u>221</u>	
—— Gabriello.....	<u>224</u>	
Aicardo, Giovanni	<u>154</u>	
Alberti, Aristotile.....	<u>201</u>	
—— Leon Batista ..	<u>192</u>	
Aleotti, Giambatista....	<u>146</u>	
Alessi, Galeazzo	<u>1</u>	
Algardi, Alessandro	<u>183</u>	
Alypius.....	<u>106</u>	
Aloisius.....	<u>109</u>	
Alonso, Giovanni.....	<u>313</u>	
Alvarez, Giovanni.....	<u>324</u>	
Amelie	<u>148</u>	
Ammanati, Bartolommeo	<u>47</u>	
Andrea da Pisa	<u>166</u>	
Andronicus	<u>28</u>	
Androuet Jacques du Cerceau.....	<u>57</u>	
Angelo and Agostino of Sienna	<u>165</u>	
Anthemius	<u>117</u>	
Antiphilus	<u>55</u>	
Antimachides	<u>33</u>	
Antistates	<u>33</u>	
Andrea di Nantes.....	<u>343</u>	
Antoninus.....	<u>101</u>	
Antonio Fiorentino	<u>226</u>	
Apollodorus	<u>93</u>	
Archer	<u>291</u>	
Argelius	<u>32</u>	
Arnaldi Conte Enea Vi- centino	<u>366</u>	
Arnolfo	<u>153</u>	
Arriaga Luigi	<u>322</u>	
Arroyo Giuseppe	<u>322</u>	
Arphe de Enrico	<u>318</u>	
B.		
Attalus	<u>14</u>	
Aviler, Charles.....	<u>255</u>	
Baldwin	<u>173</u>	
Balleso, Giovanni.....	<u>315</u>	
Barrozi, Giacomo da Vignola.....	<u>16</u>	
Bassano, Alessandro....	<u>299</u>	
Batrarchus	<u>77</u>	
Becerra, Gasparo	<u>327</u>	
Belle (de) Nicholas	<u>148</u>	
Benincasa, Giovanni ..	<u>311</u>	
Benson, William	<u>294</u>	
Bergamasco, Guglielmo	<u>244</u>	
Bernini, Giovanni Lo- renzo.....	<u>203</u>	
Berrettini, Pietro, called Pietro da Cortona....	<u>173</u>	
Berruguet, Alonzo....	<u>321</u>	
Bertano, Giambatista ..	<u>67</u>	
Bertotti Scamozzi, Ottavio	<u>370</u>	
Betune, Robert de	<u>173</u>	
Biadero, Francesco	<u>316</u>	
Bianco, Bartolommeo ..	<u>170</u>	
Bingham, Robert.....	<u>173</u>	
Blond, Jean Baptiste Alexandre le.....	<u>305</u>	
Blondel, François	<u>243</u>	
—— Jacques François	<u>346</u>	
Boccanera, Marino	<u>153</u>	
Boëtius	<u>113</u>	
Boffrand, Germain de ..	<u>326</u>	
Buonarroti, Michael An- gelo	<u>259</u>	
Bouveil, de Estienne ..	<u>145</u>	
Borromini, Francesco ..	<u>188</u>	
Bramante d'Urbino	<u>203</u>	
Bramantino Bartolommeo	<u>198</u>	
Branca, Giovanni.....	<u>150</u>	

	VOL. I.	II.
	<i>Pages</i>	
Breuck, Giacomo.....		<u>168</u>
Briosco, Andrea.....	<u>299</u>	
Brosse (de) Jacques....		<u>145</u>
Bruce, William.....		<u>290</u>
Brunelleschi, Filippo....	<u>179</u>	
Buono.....	<u>138</u>	
—— Bartolommeo ..	<u>242</u>	
Buontalenti, Bernardo..		<u>67</u>
Burlington, the Earl of		<u>295</u>
Buschetto da Dulichio..	<u>125</u>	
Bustamente, di Barto-		
lommeo.....	<u>329</u>	

C.

Cacchi, Giovanni.....	<u>130</u>
Calderari, Ottone.....	<u>371</u>
Calleschros.....	<u>33</u>
Callierates.....	<u>45</u>
Callimachus.....	<u>31</u>
Calzada, della San Domi-	
nigo.....	<u>136</u>
Calus.....	<u>14</u>
Campbell, Colin.....	<u>384</u>
Campagna, Girolamo ..	<u>127</u>
Campen, van Jacques..	<u>186</u>
Campero, Giovanni.....	<u>315</u>
Cannevari, Antonio.....	<u>322</u>
Cantoni, Simone.....	<u>13</u>
Caporali, Giambatista ..	<u>1</u>
Carilepho, William de..	<u>172</u>
Cart, <u>Pietro</u>	<u>128</u>
Casali, Fra Gian-Vin-	
cenzo.....	<u>54</u>
Cassandro.....	<u>134</u>
Cassiodorus.....	<u>114</u>
Castello, Giambatista ..	<u>65</u>
Cataneo, Danese.....	<u>28</u>
Cavagni, Giambatista ..	<u>71</u>
Celer.....	<u>87</u>
Cerati, Ab. D. Domenico	<u>369</u>
Cerdo, Vitruvius.....	<u>85</u>
Chambers, Sir William ..	<u>389</u>
Chelles, de Jean ..	<u>146</u>
Chirisophus.....	<u>27</u>
Chryses.....	<u>120</u>
Ciccione, Andrea.....	<u>191</u>
Cigoli, Luigi.....	<u>147</u>
Cione, Orgagna.....	<u>169</u>
Cleoëtas.....	<u>36</u>
Clinton, Roger de.....	<u>173</u>
Cobarrubias de Alonso..	<u>315</u>
—————.....	<u>318</u>
Cocalus.....	<u>14</u>
Cocceius Auctus, L....	<u>86</u>
Coccopani, Giovanni ..	<u>155</u>

	VOL. I.	II.
	<i>Pages</i>	
Coech, <u>Pietro</u>	<u>246</u>	
Cola dell' Amatrice....		<u>50</u>
Colonna, Francesco....	<u>201</u>	
Contuccio, Andrea.....	<u>217</u>	
Cossutius.....	<u>75</u>	
Cotte, Robert de.....		<u>298</u>
Coucy, Robert de.....	<u>155</u>	
Cozzo (di) Pietro da Li-		
mina.....	<u>140</u>	
Crescenzi, Giambatista..	<u>344</u>	
Cristobolo.....	<u>196</u>	
Ctesiphon.....	<u>23</u>	
Cyriades.....	<u>106</u>	

D.

Dalmatius, San.....	<u>116</u>
Dankers, de Ry Cornelis	<u>142</u>
Danti, Vincenzo.....	<u>51</u>
Dædalus.....	<u>12</u>
Daphnis.....	<u>53</u>
Demetrius.....	<u>53</u>
Detrianus.....	<u>98</u>
Desgodetz, Antoine.....	<u>258</u>
Dinocrates.....	<u>69</u>
Diotisalvi.....	<u>128</u>
Domingo, St.....	<u>136</u>
Donzello.....	<u>191</u>
Dorus, King.....	<u>9</u>
Dosio, Gian-Antonio ..	<u>58</u>
Dotto, Vincenzo.....	<u>136</u>
Doya, Sebastiano.....	<u>47</u>
Duca, del Giacomo.....	<u>297</u>

E.

Earnulp.....	<u>173</u>
Elphage.....	<u>172</u>
Emere (d') Garzia.....	<u>329</u>
Entinopus of Candia....	<u>108</u>
Errard, Charles.....	<u>180</u>
Erysichthon.....	<u>15</u>
Erwin of Steimbach....	<u>156</u>
Escobedo (d') Fra Gio-	
vanni.....	<u>314</u>
Eupalinus.....	<u>20</u>
Eupolemus.....	<u>29</u>
Eurialus.....	<u>15</u>
Everard.....	<u>173</u>
Fastachius.....	<u>173</u>
Ezguerra, Pietro.....	<u>323</u>
———— Giovanni.....	<u>324</u>

F.

Falconette, Giovanni Ma-	
ria.....	<u>245</u>

	Vol. L	II.
	Pages	
Fansaga, Cosimo	182	
Fiamingo, Giovanni, called Vasanio	143	
Filandro, Guillaume ..	15	
Filarete, Antonio	187	
Filippo, Mastro	311	
Fischers, Giambernardo ..	299	
Flambard, Ralph	172	
Flitcroft, Henry	383	
Florino	134	
Foix de Louis	55	
Foley	293	
Fontana, Domenico	72	
———Giovanni	87	
———Carlo	264	
Forment, Damiano	320	
Franch, Giovanni	171	
Francesco of Volterra ..	51	
Freart, de Chambray, Roland	231	
Frontinus	91	
Fuccio	149	
Fuga, Ferdinando	361	
Fulbert	137	

G

Gabriel, Jacq-es	306
Gaddi, Taddeo	167
Gainza, Martino de	321
Galilei, Alessandro	319
Galli Bibbiena, Ferdi- nando	261
———, Francesco	262
———, Antonio	263
Gand (de) Salomon	148
Garzia, Alvaro	135
Geber	324
Genga, Girolamo	247
———, Bartolomeo	248
Gerbier, Baldassar	167
Germain, St.	115
———, Thomas	328
Gibbs, James	296
Gil, Roderigo	316
Gilles de Steene	148
Giocondo, Fra	236
Giorgio (di) Francesco ..	199
Giotto	164
Giovanni di Ortega	136
——— da Pisa	162
——— di Revera Rida ..	316
——— di Sigismondo ..	226
Giovanbatista di Toledo ..	330
Gitiadas	27

	Vol. L	II.
	Pages	
Glanvill, Gilbert de	173	
Goldman, Nicolas	243	
Gonzales, Ferdinando ..	329	
Gonsalvo, San	147	
———, San Pietro ..	147	
Gougeon, Jean	348	
Grapiglia Girolamo e Giovanni	29	
Grenoble, Hugh de	173	
Grimaldi, D. Francesco ..	88	
Guarini, D. Guarino	238	
Gulielmo	142	
Gundulph	172	
Guidotti, Paolo	150	
Gumiel de Pietro	313	

H.

Hawksmoor, Nicholas ..	288
Hermodorus	76
Hermogenes	16
Hernandez, Gregorio ..	324
Herrera, (d') Giovanni ..	331
———	339
Hermon	54
Hippias	102
Hippodamus	44
Hontanon, de Giovanni Gill	315
Hyperbius	15

J.

James, John	385
Icarus	14
Ictinus	45
Ingulphus	172
Johnson, Benjamin	156
Johnson, Joel	392
Jones, Inigo	158
Isodorus, of Miletus	120
Juliano, Marco	138
Ivard	307

K.

Kent, William	383
Kenle di, Lambert e The- odoric	148

L.

Lacer, C. Giulius	96
Lanfranc	172
Lapo	149
Lacrates	54

	Vol. L	IL		Vol. L	IL
	<i>Pages</i>			<i>Pages</i>	
Leon	<u>115</u>		Modena, Niccola da	<u>349</u>	
Lescot, Pierre	<u>348</u>		Monce, de la		<u>304</u>
Lica, Peter de	<u>173</u>		Monegro, Giambatista . .	<u>339</u>	
Libon	<u>39</u>		Montereau, de Pierre . .	<u>146</u>	
Ligorio, Pirro		<u>16</u>	Monti, Gian Giacomo . .		<u>246</u>
Lombardi, Tullio e An-			Montreul, de Eudes . . .	<u>146</u>	
tonio	<u>243</u>		Mora, Francesco de . . .	<u>343</u>	
Lombardo, Pietro	<u>240</u>		—, Giovanni Gomez . . .	<u>343</u>	
—, Martino	<u>241</u>		Mormando, Gian Franc. .	<u>225</u>	
—, Sante	<u>243</u>		Muet, Pierre le		<u>181</u>
—, Carlo		<u>144</u>	Murena, Carlo		<u>323</u>
Lorenzo, San	<u>147</u>		Mustius	<u>93</u>	
Lorme, Philibert de . . .	<u>350</u>		Mutus. Caius	<u>77</u>	
Losing, Robert and Her-					
bert	<u>172</u>		N.		
Lucy, Godfrey de	<u>173</u>		Nicholas, de Belle . . .	<u>148</u>	
Lurago, Rocco		<u>32</u>	Nicon	<u>102</u>	
Lusarche, Robert de . . .	<u>145</u>		Niccola, da Pisa	<u>150</u>	
Langhi, Martino		<u>130</u>	Nigetti, Matteo		<u>157</u>
—, Onorio		<u>133</u>	Northumberland, earl of,		<u>204</u>
—, Martino, son of			Notre, Andrea le		<u>247</u>
Onorio		<u>124</u>			
			O.		
M.			Olindo, de Martin. . . .	<u>319</u> , <u>345</u>	
Machuca	<u>327</u>		Olivieri, Pietro Paolo . .		<u>131</u>
Maderno, Carlo		<u>137</u>	Olotzaga, de Giovanni . .	<u>312</u>	
Maglione, Ferrante . . .	<u>311</u>		Oppenord		<u>303</u>
Mayano, da Giuliano . .	<u>190</u>		Ordones, Gasparo	<u>344</u>	
Mandrocles	<u>37</u>		Ortega, San Giovanni . .	<u>136</u>	
Manlio, Ferdinando . . .	<u>311</u>		Oya, Sebastiano d'		<u>47</u>
Mansard, François . . .		<u>177</u>			
—, Jules Hardouin		<u>250</u>	P.		
Marchione	<u>141</u>		Paganelli, P. M. Dome-		
Marchirolo, Maestro Ba-			mico		<u>59</u>
tista		<u>56</u>	Palladio, Andrea		<u>30</u>
Margaritone	<u>152</u>		Paoletti, Niccolo		<u>367</u>
Marot, Jean		<u>255</u>	Paulinus	<u>172</u>	
Martinelli, Dominico . .		<u>257</u>	Parigi, Giulio		<u>70</u>
Mascherino, Ottaviano . .		<u>58</u>	—, Alphonso		<u>169</u>
Masuccio	<u>152</u>		Paterno Castello Ignazio		
— detto Secondo			Vincenzo, principe di		
Stefano	<u>167</u>		Biscari		<u>368</u>
Megacles	<u>55</u>		Pautre le Antoine		<u>254</u>
Meissonier, Giulio Au-			Pellegrini Pelligrino . . .		<u>60</u>
relio		<u>330</u>	Pembroke, earl of		<u>204</u>
Mercier le, Jacques . . .		<u>237</u>	Pennone, Rocco		<u>12</u>
Merliano, Giovanni . . .	<u>309</u>		Pentoma, di Tancredi . .	<u>146</u>	
Metagenes	<u>23</u>		Peonius	<u>53</u>	
Meticus	<u>29</u>		Perez, Pietro	<u>154</u>	
Metrodorus	<u>105</u>		Pericles	<u>43</u>	
Meyda, Alonzo de	<u>321</u>		Perrault, Claude		<u>228</u>
Miazzi, Giovanni		<u>378</u>	Peruzzi, Baldassare . . .		<u>237</u>
Michelozzi, Michelozzo .	<u>188</u>				
Mnesicles	<u>51</u>				

	VOL. L	II.
	Pages	
Pheaces.....	38	
Phoenix.....	71	
Philon.....	58	
Picchiani, Francesco ..	244	
Pierre.....	148	
Pietro di Pietro.....	319	
Pino de Marco.....	298	
Pintelli, Baccio.....	198	
Pippi, Giulio.....	300	
Plinius Secundus.....	92	
Polycletes.....	53	
Pollajolo, Simone, called il Cronaca.....	215	
Pollio, Vitruvius.....	83	
Pompei, Conte Alessan- dro.....	355	
Ponte, da Giovanni.....	125	
Ponzio, Flaminio.....	142	
Poore, Richard.....	173	
Porinus.....	33	
Porta, Giacamo della ..	89	
Posi, Paolo.....	354	
Postumius, C.....	86	
Pothoëus.....	55	
Pozzo, Giovanni del....	199	
Pozzo, Andrea.....	253	
——, dal Conte Giro- lamo.....	359	
Preti, Francesco Maria	374	
Primatticcio, Francesca	349	
Pteras.....	21	
Pudsey.....	173	
Pujet, Pierre.....	241	
Pyrhus.....	54	
Pytheus.....	55	

Q.

Quivill.....	173
--------------	---------------------

R.

Rabirius.....	90
Raffaello d' Urbino....	218
Raimondo, Maestro....	135
Rainaldi, Girolamo....	197
——, Carlo.....	199
Ravi, Jean.....	155
Raynelm.....	172
Remigius.....	172
Revesi, Bruti Ottavio ..	186
Revett, Nicholas.....	394
Rey del Antonio.....	342
Rholus.....	19
Rhœcus.....	18

	VOL. L	II
	Pages	
Richard.....	173	
Ridel, Geffry.....	173	
Rimachi, Huallpa Ynca	157	
Rodriguez, Ventura....	322	
Rodulf, Corrado.....	235	
Rogger.....	173	
Romaine, François....	364	
Rossi de Giovanni Antonio	232	
—— de Mattai.....	236	
Rosellini.....	197	
Ruiz, Ferdinando.....	324	
——.....	326	
Rumalde.....	123	

S.

Sabbatini.....	316
Sacchetti, Giambatista..	313
Salomon, de Gand....	148
Salvi, Niceolo.....	322
Sanchez, Filippo.....	234
Sanfelice, Ferdinando ..	317
Sangallo du Guiliano ..	210
—— di Antonio ..	213
—— Antonio.....	231
San Lucano.....	224
Sanmicheli, Michele ..	249
Satyrus.....	55
——.....	71
Saurus.....	77
Saiis, Abbot de.....	173
Scala, della Giambatista	136
Scalfuratio, Giovanni ..	242
Scamozzi, Vincenza....	93
—— Ottavio Bertotti	370
Scopas.....	58
Scrivano, Pirro Luigi ..	56
Sennamar.....	107
Serlio Sebastiano.....	346
Servandoni Niccola....	331
Servi de Constantino ..	143
Severus.....	87
Siloe, Diego.....	320
Silvani, Gherardo.....	171
Simeon.....	172
Soria, Giambatista....	168
Sostratus.....	72
Soufflot, Jacques.....	386
Spintharus.....	22
Squarcino, Bernardo ..	368
Steene, Pierre Amelie, and Gilles.....	148
Symmachus.....	113
Stuart, James.....	393
Sugger.....	143

	Vol. <u>L</u>	Il.		Vol. <u>L</u>	Il.
	<i>Pages</i>			<i>Pages</i>	
T.					
Talman, William.....	<u>289</u>		Vanvitelli, Luigi	<u>337</u>	
Talus	<u>14</u>		Varotari, Dario.....	<u>57</u>	
Tarchesius.....	<u>32</u>		Vasari, Georgio	<u>24</u>	
Tatti, Jacopo	<u>302</u>		Veau, C. Louis.....	<u>193</u>	
——, Antonio	<u>302</u>		Vergara... ..	<u>329</u>	
Taylor, Sir Robert....	<u>388</u>		Velasquez, Alessandro ..	<u>235</u>	
Teodoli, Marchese Gero-			Vidanna	<u>319</u>	
lamo	<u>329</u>		Vinci, da, Leonardo....	<u>213</u>	
Theodorus.....	<u>18</u>		Vitruvius, Pollio	<u>83</u>	
Teotocopoli, Dominico..	<u>328</u>		—— Cerdo	<u>85</u>	
Tibaldi, Dominico	<u>64</u>		Vitoni, Venturi.....	<u>209</u>	
Tito, di Santi.....	<u>70</u>		Vivianus	<u>132</u>	
Tietlandus	<u>124</u>		Vittoria, Alessandro....	<u>128</u>	
Tiodas	<u>130</u>		Volterra, (da) Francesco	<u>51</u>	
Torelli, Giacomo.....	<u>195</u>		W.		
Trophonius	<u>9</u>		Warlewast	<u>173</u>	
U.			Walkeln	<u>172</u>	
Urban	<u>173</u>		Walter	<u>172</u>	
Uria, (de) Pietro	<u>317</u>		Waterville.....	<u>173</u>	
Ustamber, Peter of	<u>133</u>		Westmorland, earl of ..	<u>293</u>	
V.			William of Wykeham ..	<u>170</u>	
Vaccaro, Domenic Anto-			Wilketellus	<u>172</u>	
nio.....	<u>321</u>		Wit, de Pierre	<u>27</u>	
Valdelvira, de <u>Pietro</u> ..	<u>323</u>		Willelmus.....	<u>142</u>	
Valerius of Ostia	<u>78</u>		Wren, Sir Christopher..	<u>270</u>	
Vanbrugh, Sir John....	<u>291</u>		Wyatt, James	<u>395</u>	
Valle, della Andrea	<u>137</u>		Wyne	<u>293</u>	
Van Campen, Jacques..	<u>186</u>		Z.		
Vanone, Andrea	<u>11</u>		Zampieri, Dominico ..	<u>152</u>	
			Zoccoli, Carlo	<u>335</u>	
			Zmilus	<u>19</u>	

INDEX OF BUILDINGS AND MATTERS.

A.

- AGRIGENTUM embellished and improved, vol. [i. 38.](#)
Aqueducts, fourteen erected under the Cæsars, vol. [i. 80.](#)
—— built by Agrippa at Rome, vol. [i. 80.](#)
—— a work on, by Julius Frontinus, vol. [i. 91.](#)
—— at Milan, vol. [i. 214.](#)
—— at Samos, vol. [i. 20.](#)
—— at Segovia, in Spain, vol. [i. 314.](#)
—— Acqua Felice at Rome, vol. [ii. 83.](#)
—— Augustus at Rome, vol. [ii. 87.](#)
—— Calzolo, vol. [ii. 154.](#)
Alexandria founded and described, vol. [i. 70.](#)
Algebra invented, vol. [i. 325.](#)
Altar, one formed of the horns of animals, vol. [i. 15.](#)
Amphitheatres, the manner of covering them invented, vol. [i. 78.](#)
—— Coliseum, or Colosseum, at Rome, vol. [i. 89.](#)
—— ——— erected on the site of Nero's house,
vol. [i. 89.](#)
—— ——— dismantled for modern works, vol. [i. 190.](#)
—— ——— intended to be converted into a factory, vol. [ii. 83.](#)
Architects in the time of Augustus, little or no account of, vol. [i. 86.](#)
Architecture, the origin of, vol. [i. xv.](#)
—— Essentials, vol. [i. xviii.](#); its changes, [xx.](#)
—— introduced into Macedonia by Alexander, vol. [i. 60.](#)
—— declined in Greece after the first Ptolemies, and flourished in Egypt, vol. [i. 74.](#)
—— civil and military work on, vol. [i. 79.](#)
—— brought to great perfection under Augustus, vol. [i. 80.](#)
—— Grecian, influenced by climate, vol. [i. 82.](#)
—— declined about the middle of the third century, vol. [i. 104.](#)
—— Gothic, abandoned in Spain in the time of Alfonzo VI., vol. [i. 134.](#) [312.](#)
—— a work on, by Leon Baptista Alberti, vol. [i. 192.](#)

- Arrangement of edifices, and of a city, vol. [i](#) lvi.
 ——— of private buildings, vol. [i](#) lviii.
 Arches, vol. [i](#) xxx.; vol. ii. [122](#).
 ——— without pedestals, vol. ii. [119](#).
 ——— at Verona, vol. [i](#) [85](#).
 ——— of Constantine, vol. ii. [124](#).
 ——— numerous, in China, vol. [i](#) [85](#).
 ——— of Galienus at Rome, vol. [i](#) [104](#).
 ——— of Septimius Severus at Rome, vol. [i](#) [104](#); vol. ii. [124](#).
 ——— of Trajan, vol. [i](#) [94](#).
 ——— of Titus, vol. ii. [124](#).
 ——— many raised by Domitian, not triumphal, vol. [i](#) [85](#).
 ——— erected at Venice on the arrival of Henry III., vol. ii. [36](#).
 ——— at Vicenza, leading to Madonna del Monte Berico, vol. ii. [40](#).
 ——— at Padua, in honour of Alvise Valaresso, vol. ii. [136](#).
 ——— Fauxbourg St. Antoine, vol. ii. [229](#).
 ——— Vienna, vol. ii. [300](#).
 Arsenal, Berlin, design for, vol. ii. [260](#).
 Athos, mount, designed to be cut into the form of a giant, vol. [i](#) [70](#).
 Athens, a square and tribunal at, vol. [i](#) [29](#).
 Athenians, celebrated for the magnificence of their edifices, vol. [i](#) [42](#).
 Attic, xxviii.
 Avila, a town in Spain, rebuilt, vol. [i](#) [134](#), [135](#).

B.

- BABYLON founded by Queen Semiramis, vol. [i](#) [1](#).
 ——— described, and an account of its magnitude, vol. [i](#) [2](#).
 Balbec and its buildings described, vol. [i](#) [60](#).
 ——— its remains almost equal those of Rome, vol. [i](#) [66](#).
 Bagdat erected out of the ruins of Babylon, vol. [i](#) [121](#).
 Bajitanus, the mountain of that name cut into the figure of Semiramis, vol. [i](#) [70](#).
 Balustrades, where used, and their proportions, xlix.
 Barrier of an ancient stadium described, vol. [i](#) [36](#).
 Basilica at Fano, erected by Vitruvius, vol. [i](#) [4](#).
 ——— of Hercules, at Ravenna, vol. [i](#) [109](#).
 ——— Plotina, at Nismes, vol. [i](#) [99](#).
 ——— of Neptune, at Rome, restored, vol. [i](#) [98](#).
 ——— of Ulpia, at Rome, vol. [i](#) [94](#).
 Baptistery at Pisa described, vol. [i](#) [128](#).
 Basements, their intention, xlvii.
 Baths, one hundred and eighteen public, erected under the Cæsars, vol. [i](#) [80](#).

- Bath of Agrippa at Rome, vol. [i. 80.](#)
 ——— Titus at Rome, erected, vol. [i. 89.](#)
 ——— Trajan at Rome, vol. [i. 94.](#)
 ——— Agrippina at Rome, vol. [i. 99.](#)
 ——— Dioclesian, vol. [i. 104.](#)
 ——— Esculapius at Epidaurus, vol. [i. 102.](#)
 ——— at Viterbo, restored, vol. [i. 197.](#)
 Beauty, on, as connected with architecture, xxi.
 Bolsena, two small temples in the lake of, vol. [i. 232.](#)
 Borgo, St. Sepulchro, Pliny's Tuscan villa at, vol. [i. 92.](#)
 Bricks, first made at Athens, vol. [i. 15.](#)
 Bridge over the Thracian Bosphorus, vol. [i. 37.](#)
 ——— at Baia, vol. [i. 87.](#)
 ——— over the Volturno, vol. [i. 91.](#)
 ——— over the Danube, vol. [i. 95.](#)
 ——— Focheu, in China, Loyang also, vol. [i. 95.](#)
 ——— over the Tagus, and its triumphal arch, vol. [i. 97.](#)
 ——— at Merida, in Spain, vol. [i. 97.](#)
 ——— Ælius, vol. [i. 99.](#)
 ——— Ustamber, vol. [i. 134.](#)
 ——— on the Ebro, vol. [i. 136.](#)
 ——— near St. Domingo, vol. [i. 136.](#)
 ——— at Nagera, vol. [i. 136.](#)
 ——— Rialto, wooden one, vol. [i. 139.](#)
 ——— ——— design for, vol. [ii. 37, 94.](#)
 ——— ——— erected, vol. [ii. 125.](#)
 ——— at Amaranto, vol. [i. 147.](#)
 ——— near Tui, in Galicia, vol. [i. 148.](#)
 ——— at Cavez, vol. [i. 148.](#)
 ——— over the Tagus, vol. [i. 154.](#)
 ——— of Peru, how constructed, vol. [i. 161.](#)
 ——— at Florence, an old one, vol. [i. 167.](#)
 ——— ——— of the Holy Trinity at, vol. [ii. 48.](#)
 ——— of St. Angelo at Rome, design for covering, vol. [i. 193.](#)
 ——— Sisto, vol. [i. 198.](#)
 ——— at Cuenca, in Spain, vol. [i. 199.](#)
 ——— over the Danube rebuilt, vol. [i. 201.](#)
 ——— at Pisa, an ingenious one constructed during a siege,
 vol. [i. 212.](#)
 ——— Pont Neuf, at Paris, erected, vol. [ii. 57.](#)
 ——— over the Tiber at Borghetto, vol. [ii. 84.](#)
 ——— Nuremberg, vol. [ii. 128.](#)
 ——— of Sighs, at Venice, vol. [ii. 127.](#)
 ——— of Verona repaired, vol. [i. 237.](#)
 ——— of Cæsar over the Rhone, some observations on, vol. [i. 237.](#)
 ——— at Paris, two built over the Seine, vol. [i. 237.](#)
 ——— Rialto, at Venice, vol. [i. 274.](#)
 ——— at Verona, the third arch the largest in Italy, vol. [i. 239.](#)
 ——— of St. Maria at Rome, strengthened, vol. [i. 285.](#)

- Bridge at Capua built, vol. [i 311](#).
 ——— of Almaraz, over the Tagus, vol. [i 317](#).
 ——— at Segovia, vol. [i 340](#).
 ——— at Pisa, of one arch, vol. [i 172](#).
 ——— at Terni over the Nera, vol. [ii 198](#).
 ——— at Paris, Pont Neuf, vol. [ii 254](#).
 ——— Westminster built, vol. [ii 397](#).
 ——— Blackfriars, vol. [ii 397](#).
 ——— Maestricht, vol. [ii 304](#).
 ——— Royal, at Paris, finished, vol. [ii 304](#).
 ——— at Sens, vol. [ii 328](#).
 ——— Monteraufaut-Yonne, of wood, vol. [ii 328](#).
 Campanile at Arezzo, vol. [i 144](#), [139](#).
 ——— Bologna, removed [35](#) feet, vol. [i 201](#).
 ——— Barbara Santa, the finest in Italy, vol. [i 302](#).
 ——— Florence, belonging to St. Maria del Fiore, vol. [i 164](#), [167](#).
 ——— Mantua, S. Barbara, vol. [i 302](#).
 ——— Naples, St. Chiara, vol. [i 168](#).
 ——— Rome, on the Campidoglio, vol. [ii 131](#).
 ——— Rotterdam, mentioned, vol. [i 143](#).
 ——— Pisa, described, vol. [i 142](#), [167](#).
 ——— ———, that of the Augustines, described, vol. [i 150](#).
 ——— Strasburgh, vol. [i 156](#).
 ——— Venice, St. Marco, vol. [i 139](#), [242](#).
 ——— Verona, of the cathedral at, vol. [i 255](#).
 Canal, one intended to be cut to Rome from the sea, vol. [i 89](#).
 ——— of the Adour in France, vol. [ii 55](#).
 ——— from lake Avernus to the Tiber, vol. [i 89](#).
 ——— Mortesana, rendered navigable, vol. [i 214](#).
 ——— Navilio at Bologna, vol. [ii 18](#).
 ——— in the gardens at Versailles, vol. [ii 249](#).
 Castle, Aquila, new one constructed at, vol. [ii 56](#).
 ——— Ancona.
 ——— Berlin, a design for, vol. [ii 260](#).
 ——— Casale de Monferrato, vol. [i 251](#).
 ——— Chambord, in France, vol. [ii 17](#).
 ——— Civita Castellana, vol. [i 213](#).
 ——— Florence, ducal palace, vol. [i 166](#).
 ——— Koningsbergh, new wing added to, vol. [ii 260](#).
 ——— Montefiascone, vol. [i 212](#).
 ——— Naples, Vicaria, vol. [i 139](#), [149](#).
 ——— ——— St. Elmo, vol. [i 168](#).
 ——— ——— Vovo, vol. [i 139](#), [149](#).
 ——— ——— Nuovo finished, vol. [i 152](#), [163](#), [190](#).
 ——— Rome, St. Angelo, vol. [i 197](#).
 ——— Perugia, vol. [ii 1](#).
 ——— Potsdam, vol. [ii 260](#).
 ——— Rochester, vol. [i 172](#).
 ——— Venice, vol. [i 251](#).

- Castle, Windsor, vol. [i](#) [170](#); vol. ii. [396](#).
- Churches. Albaro, S. Bernardo, vol. ii. [53](#).
- Ancona, San Ciriaco, vol. [i](#) [152](#); vol. ii. [339](#).
- Santo Agostino, vol. ii. [339](#).
- Angarano, La Trinita, vol. ii. [379](#).
- Aquila, in the kingdom of Naples.
- San Bernardino erected, vol. ii. p. [50](#).
- Santa Caterina della Routa, vol. ii. [365](#).
- Arezzo, vol. [i](#) [144](#).
- Dominican convent of, or San Dominico, vol. [i](#) [151](#).
- the cathedral, or Duomo, vol. [i](#) [152](#).
- Arienzo, in the kingdom of Naples.
- that of the Capuchins at, vol. ii. [336](#).
- Assisi, church and convent of, [149](#).
- di Francesco, vol. [i](#) [197](#), rebuilt, [198](#).
- Madonna degli Angeli, vol. ii. [10](#), [18](#).
- Bari, in the kingdom of Naples, cathedral of, vol. ii. [321](#).
- Bassano, S. Giambatista, vol. ii. [379](#).
- Bergamo, the cathedral of, vol. [i](#) [187](#).
- Benevento, Religiosi in San Giorgio, vol. ii. [336](#).
- Bologna, B. Virgine di Rho, vol. ii. [62](#).
- ——— del Borgo, vol. ii. [64](#).
- Madonna, near San Celso, vol. ii. [62](#).
- Corpus Domini, vol. ii. [246](#).
- Dominican church and convent, vol. [i](#) [150](#).
- San Michele, in Bosco, gate of, vol. [i](#) [227](#).
- Monti Oliveto embellished, vol. [i](#) [227](#).
- San Petronio, designs made for, vol. [i](#) [227](#); vol. ii. [10](#).
- ——— designs made for, vol. ii. [38](#).
- ——— the façade of, vol. [i](#) [301](#).
- ——— ditto, vol. ii. [17](#).
- ——— galleries and choir of, vol. ii. [246](#).
- Bosco, church and convent of the Dominicans, vol. ii. [53](#).
- Calvi, in the kingdom of Naples.
- convent of Alcanterini, vol. ii. [336](#).
- Caprarola, in the papal states.
- Padri Scalzi erected, vol. ii. [198](#).
- Capua. S. Giovanni built, vol. ii. [321](#).
- Carpi. Cathedral built after the rules of Vitruvius, vol. [i](#) [227](#).
- Castel Franco.
- S. Liberale, vol. ii. [375](#).
- Caselle, in the neighbourhood of, vol. ii. [378](#).
- Salvatronda, vol. ii. [378](#).

- Churches. London. St. Bride, Fleet Street, vol. ii. [280](#).
 Christ Church, Newgate Street, vol. ii. [280](#).
 ——— Spitalfields, vol. ii. [288](#).
 St. Christopher-le-Stocks, Broad Street, vol. ii. [281](#).
 St. Clement's Danes, Strand, vol. ii. [281](#).
 ———, East Cheap, vol. ii. [281](#).
 St. Dionis, Fenchurch Street, vol. ii. [281](#).
 St. Dunstan's in the East, Billingsgate, vol. ii. [281](#).
 St. Edmund the King, Lombard Street, vol. ii. [281](#).
 St. George, Botolph Lane, vol. ii. [281](#).
 ———, Middlesex, vol. ii. [288](#).
 ———, Bloomsbury, vol. ii. [288](#).
 ———, Hannover Square, vol. ii. [385](#).
 St. Giles in the Fields, vol. ii. [383](#).
 St. James, Garlick Hill, vol. ii. [281](#).
 ———, Westminster, vol. ii. [282](#).
 St. John's, Westminster, vol. ii. [291](#).
 St. Lawrence, Jewry, Guildhall, vol. ii. [282](#).
 St. Luke's, Old Street Road, vol. ii. [385](#).
 St. Magnus, London Bridge, vol. ii. [282](#).
 St. Margaret Pattens, Rood Lane, vol. ii. [282](#).
 ———, Lothbury, vol. ii. [282](#).
 St. Martin, Ludgate, vol. ii. [283](#).
 ——— in the Fields, vol. ii. [297](#).
 St. Mary, Abchurch, vol. ii. [283](#).
 ——— Aldermanbury, vol. ii. [283](#).
 ——— Aldermary, Bow Lane, v. ii. [283](#).
 ——— le Bow, Cheapside, vol. ii. [283](#).
 ——— Magdalen, Old Fish Street, vol. ii. [283](#).
 ——— Somerset, Thames Street, vol. ii. [283](#).
 ——— in the Strand, vol. ii. [297](#).
 ——— at Hill, Billingsgate, vol. ii. [284](#).
 ——— Woolnoth, Lombard Street, vol. ii. [288](#).
 St. Matthew, Friday Street, vol. ii. [284](#).
 St. Michael, Basinghall Street, vol. ii. [284](#).
 ———, Queenhithe, vol. ii. [284](#).
 ———, Crooked Lane, vol. ii. [284](#).
 ———, Cornhill, vol. ii. [284](#).
 ———, Royal, College Hill, vol. ii. [284](#).
 ———, Wood Street, vol. ii. [284](#).
 St. Mildred, Bread Street, vol. ii. [285](#).
 ———, Poultry, vol. ii. [285](#).

- Churches. London. St. Nicholas, Cole Abbey, Old Fish Street, vol. ii. [285](#).
 St. Olave, Jewry, vol. ii. [285](#).
 ———, Southwark, vol. ii. [383](#).
 St. Paul, cathedral of, described, vol. ii. [273](#).
 St. Peter, Cornhill, vol. ii. [285](#).
 ———, Westminster, repaired, vol. ii. [287](#).
 St. Sepulchre, Snowhill, vol. ii. [285](#).
 St. Stephen, Walbrook, vol. ii. [285](#).
 ——— Coleman Street, vol. ii. [286](#).
 St. Swithin, Cannon Street, vol. ii. [286](#).
 St. Vedast, Foster Lane, Cheapside, vol. ii. [286](#).
 Lincoln cathedral, vol. i. [172](#), [173](#), [174](#).
 Litchfield cathedral, vol. i. [173](#), [175](#), [177](#).
 Norwich cathedral, vol. i. [172](#), [173](#), [174](#), [176](#), [177](#), [178](#).
 Oxford cathedral, vol. i. [177](#).
 Peterborough cathedral, vol. i. [173](#), [175](#), [176](#).
 Rochester cathedral, vol. i. [172](#), [173](#), [175](#).
 Salisbury cathedral, vol. i. [173](#).
 Southampton, vol. ii. [395](#).
 Wapping, vol. ii. [392](#).
 Wells cathedral, vol. i. [174](#), [176](#), [177](#).
 Windsor, St. George's chapel, vol. i. [177](#).
 Winchester cathedral, vol. i. [172](#), [173](#), [176](#), [177](#), [178](#).
 Westminster, Henry the Seventh's chapel, vol. i. [177](#).
 York cathedral, vol. i. [173](#), [174](#), [176](#).
 Ferrara. Monte Oliveto, vol. ii. [246](#).
 ——— Monastery of, vol. ii. [246](#).
 Florence. S. Agostino, convent of, vol. i. [211](#) ;
 vol. ii. [70](#).
 ——— Degli Angeli, vol. i. [184](#).
 ——— cloister of, vol. ii. [157](#).
 ——— S. Croce, the abbey and church of, vol. i. [153](#).
 ——— house for the novices, vol. i. [189](#).
 ——— Michael Angelo buried in, vol. i. [294](#).
 ——— chapel of, for the Niccolini, vol. ii. [58](#).
 ——— S. Domenicani. The convent built, vol. i. [189](#).
 ——— S. Francesco, on the hill of San Miniato, called the Villanella, vol. i. [216](#).
 ——— di Paolo, vol. ii. [172](#).
 ——— S. Giovanni, Baptistery gates, vol. i. [187](#).

- Churches. Florence. S. Lorenzo, vol. [i. 183.](#)
 the façade designed, vol. [i. 219, 303.](#)
 second sacristy of, vol. [i. 273.](#)
 third sacristy in, vol. [ii. 157.](#)
 S. Maria del Fiore, vol. [i. 153.](#)
 lantern or cupola, vol. [i. 222.](#)
 model for the altar and choir, vol. [i. 223.](#)
 façade of wood erected, vol. [i. 302.](#)
 designs made for, vol. [ii. 148.](#)
 designs made for, vol. [ii. 172.](#)
 S. Majano, campanile of, vol. [i. 222.](#)
 S. Maria Maggiore enlarged, vol. [i. 139.](#)
 Novella, vol. [i. 193.](#)
 on the Arno, vol. [i. 149.](#)
 S. Maddalena de Pazzi, cloister of, v. [i. 210.](#)
 Ionic order, copied from
 an ancient fragment, vol. [i. 210.](#)
 S. Michele degli Antenori, vol. [ii. 157.](#)
 S. Nunziata, or the Annunciation, vol. [i. 187,](#)
 [189.](#)
 the tribune erected, vol. [i. 193.](#)
 a loggia erected at, vol. [ii. 130.](#)
 Ogni Santi erected, vol. [ii. 157.](#)
 Oratorio, Padre dell', vol. [ii. 173.](#)
 La Pace, the convent of, vol. [ii. 70.](#)
 S. Servi, vol. [i. 189.](#)
 Spirito Santo, vol. [i. 185.](#)
 sacristy of, very elegant, vol. [i. 216.](#)
 chapel del Sacramento, vol. [i. 217.](#)
 asylum of the sacristy, v. [i. 217.](#)
 campanile of, erected, v. [i. 222.](#)
 choir and great altar of, vol. [ii. 130.](#)
 Stimate, vol. [ii. 171.](#)
 S. Teresa del Gesu, vol. [ii. 155.](#)
 S. Trinita and Monastery, vol. [i. 151.](#)
 façade of, vol. [ii. 68.](#)
 Teatini, church and monastery, vol. [ii. 171.](#)
- France. Amiens cathedral commenced, vol. [i. 145.](#)
 Chalons church and cathedral, vol. [i. 116.](#)
 Chartres cathedral rebuilt, vol. [i. 138.](#)
 Clermont. Nôtre Dame at, vol. [i. 115.](#)
 Coulanges, vol. [ii. 332.](#)
 Dijon. Chapel des Etats at, vol. [ii. 306.](#)
 Lyons. Cistercians, vol. [ii. 304.](#)

Churches.

- Lyons. St. Juste, vol. ii. [304](#).
 Dunes, in Flanders, vol. i. [148](#).
 Marseilles. Capuchins erected, vol. ii. [242](#).
 La Charité, vol. ii. [242](#).
 Paris. Assumption, near the gate of St. Honoré,
 vol. ii. [180](#).
 St. Anna erected, vol. ii. [240](#).
 Blancs Manteaux, vol. i. [147](#).
 St. Chapelle, vol. i. [147](#).
 St. Catherine du Val des Ecoliers, vol. i. [147](#).
 Des Chartreux, vol. i. [147](#).
 Des Cordelliers, vol. i. [147](#).
 La Charité, vol. ii. [298](#).
 St. Croix de la Brétonnerie, vol. i. [147](#).
 ————— Rouge, vol. ii. [194](#).
 St. Dennis erected, vol. i. [121](#), [143](#).
 ————— the Annunciation at, vol. ii. [252](#).
 Enfans trouves, in Rue St. Antoine, vol. ii. [178](#).
 Feuillans, in Rue St. Honoré, vol. ii. [178](#).
 ————— façade for, vol. ii. [255](#).
 Germain, formerly St. Vincent, vol. i. [115](#).
 St. Gervaise, vol. ii. [145](#).
 Hôtel de Dieu, vol. i. [147](#).
 Invalids, finished, vol. ii. [252](#).
 St. Louis du Louvre, built, vol. ii. [329](#).
 La Madelène, vol. ii. [307](#).
 Des Mathurins, vol. i. [147](#).
 Merci, de la, vol. ii. [327](#).
 Minimes, in the Place Royal, vol. ii. [178](#).
 Nôtre Dame, built, vol. i. [146](#), [155](#).
 —————, chapel of Louis XIII. vol. ii.
 [298](#).
 Oratoire in Rue St. Honoré built, vol. ii. [237](#).
 Prémontres, vol. ii. [194](#).
 Porte Royale, in Fauxbourg St. Jaques,
 vol. ii. [254](#).
 Quatre Nations, college of, vol. ii. [194](#).
 Richelieu, vol. ii. [237](#).
 St. Roche, erected, vol. ii. [238](#).
 —————, portico of, vol. ii. [298](#).
 Sorbonne, erected, vol. ii. [238](#).
 St. Sulpice, design for, vol. ii. [194](#).
 —————, façade, vol. ii. [332](#).
 Val de Grace, vol. ii. [179](#).
 ————— finished, vol. ii. [181](#).
 Victoire, the choir and altar of, vol. ii. [303](#).
 Visitation, Rue St. Antoine, vol. ii. [178](#).
 Rennes. Clock-tower, and garrison of, vol. ii. [306](#).
 Rheims cathedral built, vol. i. [123](#), [155](#).
 St. Nicaise at, vol. i. [155](#).

- Churches. Vincennes. The holy chapel at, vol. [i](#). [146](#).
 Sens. Great altar in the cathedral, vol. [ii](#). [333](#).
 Tours. The Annunciation at, built, vol. [ii](#). [238](#).
- Foligno, in the Papal States.
 Holy Trinity, vol. [ii](#). [334](#).
 Cathedral of, restored, vol. [ii](#). [339](#).
- Frascati, in the Papal States.
 Cathedral of, vol. [ii](#). [270](#).
- Genoa. St. Ambrozio, vol. [ii](#). [14](#).
 Annunziata, design for, vol. [ii](#). [242](#).
 S. Bernardo, erected, vol. [ii](#). [53](#).
 S. Catarina, very susceptible of improvement,
 vol. [ii](#). [66](#).
 S. Domenico, the choir of, vol. [ii](#). [155](#).
 Gesu, college of, vol. [ii](#). [171](#).
 Lorenzo Metropolitana, vol. [ii](#). [14](#).
 Madonna de Carignano, vol. [ii](#). [2](#).
 ————— two statues in, vol. [ii](#). [242](#).
 S. Matteo, rebuilt, vol. [ii](#). [65](#).
- Germany.
 Einsidlen, and monastery, vol. [i](#). [124](#).
 Fueda, cathedral at, vol. [ii](#). [265](#).
 Metz. St. Louis des Dames Chanoines, vol. [ii](#). [346](#).
 Prague. S. Maria Dettinga, vol. [ii](#). [240](#).
 Saltzburg. The cathedral of, erected, vol. [ii](#). [96](#).
 Nostra Signora, cupola of, vol. [ii](#). [301](#).
 Strasbourgh, vol. [i](#). [156](#).
 Vienna. Several modernised at, vol. [ii](#). [254](#).
 St. Charles Borromeo, vol. [ii](#). [301](#).
 Upsal. Dedicated to the Trinity, vol. [i](#). [145](#).
- Imola. S. Francesco, vol. [i](#). [166](#).
- Loretto, in the Papal States, vol. [i](#). [191](#).
 S. Madonna embellished, vol. [i](#). [233](#).
 Santa Casa, erected in, vol. [ii](#). [150](#).
- Lucca. Serviti, the large marble altar of, vol. [ii](#). [54](#).
- Macerata. Misericordia, chapel of, vol. [ii](#). [339](#).
- Mantua. S. Andrea, vol. [i](#). [193](#);
 ————— cupola of, finished, vol. [ii](#). [310](#).
 S. Barbara, erected, vol. [ii](#). [67](#).
 S. Benedetto, dome rebuilt, vol. [i](#). [301](#).
 Cathedral, façade of, erected, vol. [i](#). [247](#).
- Milan. S. Celso, façade of, vol. [ii](#). [10](#).
 Certosa of Pavia, belonging to the Carthu-
 sians, vol. [ii](#). [60](#).
 Cathedral, vol. [i](#). [183](#); vol. [ii](#). [60](#).
 ————— façade of, vol. [ii](#). [310](#), [339](#).
 S. Ignazio, or the Jesuits', vol. [ii](#). [62](#).

- Churches. Milan. S. Lorenzo, built, vol. ii. [62](#).
 S. Satiro, vol. i. [198](#).
 S. Vittore, erected, vol. ii. [10](#).
 Modena. S. Agostino, erected, much admired, vol. ii. [246](#).
 S. Vincenzo erected, vol. ii. [239](#).
 Monaco. Madonna, mausoleum, called Il Bavaro, vol. ii. [27](#).
 Mondavio. S. Pietro, unequalled in beauty, vol. i. [248](#).
 Montalto. Parochial, vol. ii. [197](#).
 Montefiascone, cathedral of, vol. i. [249](#); vol. ii. [265](#).
 Monteporzio. Parochial one of, vol. ii. [201](#).
 Monte Pulciano. Madonna, a beautiful church, vol. i. [213](#).
 Monterano. Scolopj erected, vol. ii. [236](#).
 Murano. Emiliana de Camaldolesi, vol. i. [244](#).
 Naples. S. Agostino, near the Mint, rebuilt, vol. ii. [245](#).
 Alvina, vol. ii. [318](#).
 S. Apostoli, house of the Teatini, vol. ii. [88](#).
 ———, church of, vol. ii. [88](#).
 S. Anna of the Lombards, chapel in, vol. ii. [85](#).
 S. Caterina a Formello, vol. i. [226](#).
 Cathedral, mentioned as a Gothic work, vol. i. [151](#).
 Chapel of the Treasury, vol. ii. [88](#).
 Certosa, or Carthusian, vol. i. [168](#).
 S. Chiara, vol. i. [168](#).
 Della Croce, and monastery, vol. i. [168](#).
 Concezione, at Monte Calvario, vol. ii. [321](#).
 ———, at San Luigi di Palazzo, vol. ii. [341](#).
 Constantinopoli, Madonna di, vol. ii. [182](#).
 S. Domenica Maggiore, vol. i. [152](#).
 ——— restored, vol. i. [224](#).
 ——— chapel of, vol. ii. [182](#).
 Donna Alvina, vol. ii. [318](#).
 Divino Amore, erected, vol. ii. [245](#).
 S. Francesco Saverio, façade of, vol. ii. [182](#).
 S. Gaudioso, staircase of, vol. ii. [182](#).
 S. Gennaro, chapel of the treasury of, vol. ii. [182](#).
 Il Geromini, belonging to the Fathers del' Oratorio, vol. ii. [71](#).
 Il Gesu, now Il Salvatore, vol. i. [224](#).
 ——— Vecchio, now the university, vol. i. [298](#).

- Churches. Naples. Il Gesu Nuovo, principal altar of, vol. ii. [182](#).
 S. Giacomo, vol. i. [310](#), [330](#).
 ——— tombs in, vol. i. [310](#).
 S. Giorgio du Genovesi, vol. i. [310](#).
 S. Giovanni e Maggiore, vol. i. [152](#).
 ——— delle Monache, without the
 Porta Alba, erected, vol. ii. [245](#).
 S. Girolamo delle Monache, modernised,
 vol. ii. [245](#).
 S. Gregorio Armeno, vol. ii. [71](#).
 S. Giuseppe, vol. i. [224](#).
 Jesuits, at, vol. ii. [318](#).
 S. Lorenzo, vol. i. [151](#), [168](#);
 ——— façade, vol. ii. [318](#).
 S. Maria della Nuova, completed, vol. i.
[152](#), [163](#).
 S. Maria degli Angioli, at Pizzo Falcone,
 vol. ii. [88](#).
 S. Maria Egiziaca, vol. i. [224](#).
 ———, in the Borgo della Virgine, vol. ii.
[318](#).
 S. Maria delle Grazie, vol. i. [168](#).
 S. Marcellino erected, vol. ii. [341](#).
 S. Michele erected, vol. ii. [321](#).
 De' Miracoli, vol. ii. [245](#).
 Monte della Misericordia, erected, vol. ii.
[244](#).
 ——— Oliveto, vol. i. [192](#).
 ——— della Pieta, vol. ii. [71](#).
 ——— de Poveri, rebuilt, vol. ii. [245](#).
 ——— Virgine, near Gesu Vecchio, vol. ii.
[321](#).
 Della Nunziata built, vol. i. [311](#); vol. ii. [341](#).
 Nunziatella, near Pizzo Falcone, vol. ii. [318](#).
 Dell' Oratorio, vol. ii. [71](#).
 Pontano, vol. i. [192](#).
 Rotonda, vol. ii. [341](#).
 Regina Cœli modernised, vol. ii. [318](#).
 Santo Spirito rebuilt, vol. ii. [71](#).
 Sapienza, façade of, vol. ii. [182](#).
 Il Seggio di Nido, vol. i. [226](#).
 S. Severino, erected, vol. i. [225](#).
 ——— cloister at, vol. i. [192](#); vol. ii.
[182](#).
 ——— tomb of Andrea Bonifaccio,
 vol. i. [310](#).
 Della Stella rebuilt, vol. i. [226](#).
 S. Teresa degli Scabri, façade of, vol. ii. [182](#).
 S. Trinita di Palazzo modernised, vol. i. [298](#).
 Orvietto. S. Maria, vol. i. [151](#).

Churches. Orvieto. San Domenichino, vol. [i](#) [249](#).

Padova, or Padua.

S. Antonio, altar-piece of, vol. [i](#) [299](#).

————— sepulchre of Alessandro Contarini,
vol. [ii](#) [28](#).

Certosa, vol. [ii](#) [370](#).

Gli Eremitani, or Hermitage, vol. [i](#) [141](#).

S. Giustina, erected in the harmonic medium,
vol. [i](#) [299](#).

————— façade of, designed, vol. [ii](#) [377](#).

————— cloister of, vol. [i](#) [241](#).

S. Lucia, vol. [ii](#) [370](#).

Madonna della Grazie, vol. [i](#) [245](#).

————— called the Rotunda, vol. [i](#) [245](#).

S. Rosa, vol. [ii](#) [370](#).

Monte di Pietà, vol. [ii](#) [136](#).

Delle Torresino, vol. [ii](#) [370](#).

Pavia. Carthusian monastery of, vol. [ii](#) [60](#).

Perugia. Monte Morcino, vol. [ii](#) [334](#).

San Francesco, vol. [ii](#) [18](#).

Olivatani, vol. [ii](#) [339](#).

Pesaro. S. Giovanni Battista built, vol. [i](#) [247](#).

Madalena, vol. [ii](#) [339](#).

Pisa. Cathedral, vol. [i](#) [125](#), [163](#).

De Cavalieri, vol. [ii](#) [69](#).

S. Michele, vol. [i](#) [150](#).

S. Stephano, and dwellings for the Cavaliers,
vol. [ii](#) [24](#).

Pistoja. S. Martino, vol. [i](#) [128](#).

S. Andrea, vol. [i](#) [139](#).

S. Giovanni, vol. [i](#) [166](#).

Mad. del Umilità, vol. [i](#) [209](#).

————— the beautiful cupola of,
vol. [ii](#) [24](#).

Puglia. Monte Gargano, vol. [ii](#) [381](#).

Rimini, in the Papal States. S. Francesco, much
admired, vol. [i](#) [194](#).

Rome. S. Adriano restored, vol. [ii](#) [134](#).

S. Agnese, in Piazza Navona, façade of, vol. [ii](#) [190](#), [198](#).

S. Agostino, sacristy of, vol. [ii](#) [335](#).

————— a group of statues of S. Anna,
Christ, &c. vol. [i](#) [217](#).

————— convent of, erected, vol. [ii](#) [339](#).

S. Alessio, Bagni chapel, vol. [ii](#) [335](#).

S. Anastasia, great altar in, vol. [ii](#) [133](#).

————— façade of, vol. [ii](#) [134](#).

- Churches. Rome. S. Andrea della Fratte, vol. ii. [189](#).
 ——— di Ponte Molle, on the Via Flaminia, vol. ii. [19](#).
 ——— della Valle, vol. ii. [88](#), [130](#).
 ——— choir and cupola of, vol. ii. [141](#).
 ——— façade of, vol. ii. [200](#).
 ——— Genette chapel, v. ii. [264](#).
 dell' Anima, square façade erected, vol. i. [211](#).
 ——— The tomb of Adrian VI. vol. i. [228](#).
 S. Antonio, of the Portuguese, erected, vol. ii. [134](#).
 ——— Zampaj chapel, vol. ii. [334](#).
 S. Apollinare erected, vol. ii. [364](#).
 S. S. Apostoli modernised, vol. ii. [200](#).
 ——— façade of, vol. ii. [325](#).
 Bambino Gesu erected, vol. ii. [363](#).
 Campo Santo Madonna, vol. ii. [200](#).
 S. Carlino, at the Quattro Fontani, vol. ii. [189](#).
 S. Carlo, on the Corso, erected, vol. ii. [134](#).
 ——— façade of, vol. ii. [200](#).
 ——— great altar of, vol. ii. [134](#).
 ——— transept built, vol. ii. [174](#).
 ——— de Catenari, façade of, vol. ii. [169](#).
 S. Caterina of Sienna, on the Monte Magnanapoli, vol. ii. [169](#).
 La Certosa, designs for, vol. i. [288](#).
 S. Chiara, vol. ii. [52](#).
 ——— erected, vol. ii. [141](#).
 Chiesa Nuova erected, vol. ii. [131](#).
 ——— oratory of the Fathers, vol. ii. [189](#).
 La Consolazione, in the Corso, vol. ii. [131](#).
 Le Convertite, in the Corso, vol. ii. [131](#).
 S. Eustachio, great altar of, vol. ii. [323](#).
 S. Francesca Romana, in Campo Vaccino, vol. ii. [145](#).
 S. Galla, façade, vol. ii. [236](#).
 Il Gesu Maria, on the Corso, vol. ii. [200](#).
 ——— altar in, vol. ii. [253](#).
 S. Giacomo, of the Spaniards, repaired, vol. i. [232](#); vol. ii. [365](#).
 ——— degli Incurabili erected, vol. ii. [51](#).
 ——— finished, vol. ii. [137](#).
 S. Giovanni, of the Florentines, vol. i. [232](#).

- Churches. Rome. S. Giovanni, of the Florentines, the choir and cupola of, vol. ii. [137](#).
 ———, a great expense, various designs for, vol. i. [287](#).
 ——— façade of, vol. ii. [319](#).
 ——— e Paolo, vol. ii. [322](#).
 ——— Laterano, vol. i. [197](#).
 ——— façade of, vol. ii. [81](#).
 ——— great nave of, vol. ii. [189](#).
 ———, façade, &c. vol. ii. [319](#), [338](#).
 S. Girolamo, façade of, vol. ii. [131](#).
 ———, monument of the count Montecuti, vol. ii. [173](#).
 I Greci, in Strada del Babbuino, vol. ii. [91](#).
 S. Gregorio, façade and porticoes of, vol. ii. [169](#).
 S. Grisogono, portico of, erected, vol. ii. [169](#).
 S. Ignazio, or church of the Jesuits, vol. ii. [20](#), [152](#).
 ——— façade of, vol. ii. [184](#).
 ——— altar of, exceedingly sumptuous, vol. ii. [253](#).
 S. Lorenzo, without the walls, vol. i. [197](#).
 ——— and Damaso, vol. i. [204](#).
 ——— altar of, vol. ii. [323](#).
 ——— a beautiful Corinthian door at, vol. ii. [20](#).
 ——— chapel of the Conception, vol. ii. [173](#).
 S. Luigi, or S. Louis, erected, vol. ii. [91](#), [270](#).
 S. Lucia in Selce erected, vol. ii. [141](#).
 Maddelena partly erected, vol. ii. [234](#).
 Mad. de Loretto, near Trajan's Column, vol. i. [231](#).
 ——— Lantern placed on the double cupola, vol. i. [297](#).
 ——— de' Monte, vol. ii. [91](#).
 ——— del Orto designed, vol. i. [300](#).
 ——— façade of, vol. ii. [134](#).
 ——— del Popolo, two sepulchres in the choir, vol. i. [217](#).
 ——— Cibo chapel in, vol. ii. [264](#).
 ——— de Settu Dolori, vol. ii. [190](#).
 S. Marcello on the Corso, commenced, vol. i. [303](#).
 ——— façade to, vol. ii. [264](#).

- Churches. Rome. S. Marco, vol. [i. 190.](#)
 S. Maria, in Campitelli, vol. ii. [200.](#)
 ——— del Popolo, vol. [i. 198.](#)
 ——— Liberatrice, in Campo Vaccino, vol.
 ii. [133.](#)
 ——— Maggiore, façade of, vol. ii. [201](#) ;
[363.](#)
 ——— the Presipio chapel, vol. [i.](#)
[144](#) ; vol. ii. [72.](#)
 ——— sepulchre for Clement IX.
 in, vol. ii. [201.](#)
 ——— the roof gilt with the first
 gold brought from America, vol. [i. 211.](#)
 ——— sacristy of, vol. ii. [142.](#)
 ——— chapel erected in, vol. [i.](#)
[289.](#)
 ——— the Paolina chapel in, vol.
 ii. [142.](#)
 ——— altar of,
 vol. ii. [198.](#)
 ——— in Trastevere, repaired, vol. ii. [131.](#)
 ——— soffite of, vol. ii. [153.](#)
 ——— in Via Lata, vol. ii. [91.](#)
 ——— erected, and much ad-
 mired, vol. ii. [174.](#)
 S. Maria Martina rebuilt, vol. ii. [175.](#)
 S. Marta, vol. ii. [264.](#)
 S. Michele a Ripa, vol. ii. [265.](#)
 La Minerva, chapel for the Aldobrandini,
 vol. ii. [141.](#)
 ——— monument for the family de
 Amicis, vol. ii. [173.](#)
 ——— to cardinal Bonelli,
 vol. ii. [200.](#)
 Miracoli erected, vol. ii. [200.](#)
 ——— great altar, cupola, and ornaments,
 vol. ii. [264.](#)
 ——— Casa of, vol. ii. [330.](#)
 Monserrato erected, vol. [i. 232.](#)
 ——— façade of, vol. ii. [52.](#)
 Monte della Pietà, chapel of, vol. ii. [234.](#)
 La Morte, in the Strada Giulia, vol. ii.
[362.](#)
 S. Niccola di Tolentino, great altar in, vol. ii.
[184.](#)
 Noviziato de Gesuite, vol. ii. [215.](#)
 Oratorio, vol. ii. [189.](#)
 La Pace restored, vol. ii. [173.](#)
 ——— the cloister of, rebuilt, vol. [i. 203.](#)

- Churches. Rome. S. Pantaleo erected, vol. ii. [234](#).
 ----- great altar, vol. ii. [335](#).
 S. Paolo, vol. i. [197](#).
 ----- baptistery of, vol. ii. [323](#).
 ----- great altar and choir of, vol. ii. [133](#).
 S. Petronio di Bologna, façade of, vol. ii. [201](#).
 S. Pietro e Marcellino erected, vol. ii. [329](#).
 ----- Montorio, temple in the cloister of, vol. i. [206](#).
 ----- Picture of S. Francesco, vol. i. [262](#).
 ----- in Vaticano, or St. Peter's, bronze gates of, vol. i. [187](#).
 ----- Commenced by Bramante, vol. i. [207](#).
 ----- A design made by Raphael, vol. i. [220](#).
 ----- Model made by Peruzzi, vol. i. [227](#).
 ----- Model in wood, cost 4184 crowns, vol. i. [235](#).
 ----- Piers of, enlarged, and foundations, vol. i. [235](#).
 ----- Foundations further strengthened, vol. i. [239](#).
 ----- Model made by Michael Angelo, vol. i. [279](#).
 ----- Two extreme curves of the cross commenced, vol. i. [280](#).
 ----- The eight tabernacles reduced to three, vol. i. [280](#).
 ----- Model for the cupola of, vol. i. [286](#).
 ----- Alterations continually occurring, vol. i. [286](#).
 ----- Description of, as intended to have been finished by Michael Angelo, vol. i. [295](#).
 ----- Defects in, as executed by Michael Angelo, vol. i. [296](#).
 ----- The cupola vaulted, vol. ii. [89](#).
 ----- Its plan altered to a Latin cross, vol. ii. [139](#).
 ----- Portico and façade of, erected, vol. ii. [140](#).
 ----- Campanile of, designs for, vol. ii. [199](#).

- Churches. Rome. S. Pietro, Piazza before St. Peter's, designs for, vol. ii. [199](#).
- Baldequino in, vol. ii. [205](#).
- Campaniles and the façade erected, vol. ii. [208](#).
- Campanile taken down, vol. ii. [209](#).
- Barberini sepulchre, vol. ii. [209](#).
- Piazza begun, vol. ii. [211](#).
- Flight of steps, called Scala Regia, vol. ii. [213](#).
- Equestrian statue of Constantine, vol. ii. [213](#).
- Chair of St. Peter, vol. ii. [214](#).
- Sepulchre of Clement X., vol. ii. [236](#).
- Sepulchre of queen Christina, vol. ii. [264](#).
- chapel of baptism at, vol. ii. [265](#).
- A description of the Basilica, vol. ii. [265](#).
- Cupola strengthened, vol. ii. [269](#).
- design and model for the sacristy and deanery of, vol. ii. [309](#).
- moveable scaffold in, vol. ii. [339](#).
- Illumination of the cupola, vol. ii. [339](#).
- in Vincolo, vol. i. [198](#).
- Propagande Fide, vol. ii. [189](#).
- Rita, façade of, vol. ii. [264](#).
- S. Salvatore in Lauro erected, vol. ii. [59](#).
- La Sapienza erected, vol. i. [289](#); vol. ii. [188](#).
- Della Scala, the nave erected, vol. ii. [52](#).
- - façade of, vol. ii. [59](#).
- S. Sebastiano rebuilt, vol. ii. [142](#).
- finished, vol. ii. [143](#).
- S. Silvester, vol. i. [144](#).
- S. Sisto, vol. i. [198](#).
- S. Spirito erected, vol. i. [144](#).
- façade of, vol. ii. [59](#).
- - de Neapolitani erected, vol. ii. [182](#), [264](#).
- Le Stimate built, vol. ii. [322](#).
- S. Susanna, façade of, vol. ii. [137](#).
- Traspontina, façade of, vol. ii. [59](#).
- Villa Bolognetta, near the Porta Pia, vol. ii. [323](#).
- Vicovara built, vol. ii. [330](#).
- S. Vincenzo ed Anastasio, near the fountain of Trevi, vol. ii. [134](#).

Churches. Rome. La Vittoria erected, vol. ii. [141](#).
 ————— façade of, vol. ii. [168](#).

Ronciglione, cathedral of, built, vol. ii. [201](#).

Salerno. San Matteo, vol. ii. [84](#).

Schio. Collegiate one, vol. ii. [381](#).

 S. Vito, near, vol. ii. [381](#).

 Simonzo, vol. ii. [381](#).

Sicily. Messina. Sommaschi erected, vol. ii. [239](#).

Sienna. Cathedral, its façade, vol. i. [163](#), [165](#).

 S. Giovanni, vol. i. [151](#).

 S. Francesco, vol. i. [165](#).

 S. Maria, vol. i. [165](#).

 S. Agostino, vol. ii. [339](#).

Sinegalia, that of the Jesuits, vol. ii. [355](#).

Spain.

Alcala, church belonging to the college of, vol. i. [313](#), [343](#); contains the monument of Cardinal Ximenes, vol. i. [313](#).

Astorga, cathedral of, vol. i. [327](#).

 Pegnalba, vol. i. [133](#).

Asturias. S. Croce, vol. i. [130](#).

Avila, cathedral at, vol. i. [135](#).

Baeza, vol. i. [323](#).

Burgos, cathedral of, vol. i. [315](#).

Cuença. Dominican convent, vol. i. [199](#).

 Cathedral of, vol. i. [322](#).

 Chapel of Trasparente, vol. i. [322](#).

 Valera, church and chapel of, vol. i. [329](#).

Fordelaguna. S. Francesco at, vol. i. [315](#).

Granada, cathedral at, vol. i. [320](#).

 S. Girolamo, vol. i. [320](#).

Guadalaxara, S. Francesco at, vol. ii. [234](#).

Guadalupe, sanctuary of, vol. i. [313](#).

Huesca, in Arragon, cathedral of, vol. i. [312](#).

Illesca. Hospital della Carita, vol. i. [328](#).

Leon. S. Isidorus, vol. i. [133](#).

Lisbon. S. Maria della Divina Provvidenza, vol. ii. [240](#).

Liria, vol. i. [345](#).

Lugo, cathedral of, vol. i. [135](#).

Madrid. S. Croce, vol. i. [130](#).

 S. Filippo il Reale, cloister of, vol. i. [343](#).

 S. Giovanni Battista, vol. i. [133](#).

 S. Giuliano, or S. Julius, vol. i. [131](#).

 S. Maria, vol. i. [130](#).

- Churches. Madrid. S. Martino, vol. [i. 344.](#)
 S. Michele, vol. [i. 130.](#)
 Pegnalba, vol. [i. 133.](#)
 S. Sebastiano, vol. [i. 344.](#)
 S. Salvatore, vol. [i. 130.](#)
 Gli Scalze Reale, altar of, vol. [i. 327.](#)
 Las Vallecas modernised, vol. [ii. 235.](#)
 * Oviedo. Salvatore Basilica, vol. [i. 130.](#)
 Madonna, vol. [i. 130.](#)
 S. Michele, vol. [i. 131.](#)
 S. Maria, vol. [i. 132.](#)
 S. Julius, vol. [i. 131.](#)
 Placentia. Cathedral, vol. [i. 323, 324.](#)
 S. Matteo de Cacereo, vol. [i. 323.](#)
 Robledillo, vol. [i. 323.](#)
 Malpartida, vol. [i. 323.](#)
 Salamanca. Cathedral, vol. [i. 315.](#)
 Saragossa. S. Engracia, vol. [i. 313.](#)
 ————— façade of, vol. [i. 320.](#)
 Segovia. Cathedral, vol. [i. 316.](#)
 Seville. Cathedral, vol. [i. 311, 315.](#)
 Royal chapel at, vol. [i. 321.](#)
 Giralda tower at, vol. [i. 324.](#)
 S. Martino, vol. [i. 154.](#)
 Silos. San Dominico, vol. [i. 328.](#)
 Toledo. Cathedral, vol. [i. 154, 315, 318.](#)
 Dominican church and convent at, vol. [i. 328.](#)
 Chapel of the Sacrament, vol. [i. 339.](#)
 Valentia. Cathedral of, vol. [i. 171.](#)
 ————— façade of, vol. [ii. 235.](#)
 S. Michel de Re, vol. [i. 319, 345.](#)
 Valladolid. Santa Croce, vol. [i. 312.](#)
 Ubeda. Chapel del Salvatore, vol. [i. 323.](#)
- Terni, in the Papal States.
 Cathedral of, vol. [ii. 334.](#)
- Todi, in the Papal States.
 One described at, as being the model to St. Peter's, vol. [i. 208.](#)
- Treviso, in the Venetian States.
 Madonna Grande, vol. [i. 243.](#)
 San Paolo, three chapels erected, vol. [i. 243.](#)
 Cathedral, Chapel del Sacramento, vol. [i. 243.](#)
- Turin. Il Carmine, façade of, erected, vol. [ii. 303.](#)

- Churches. Turin. S. Filippo Neri erected, vol. ii. [239](#).
 S. Lorenzo erected, vol. ii. [239](#).
 S. Sudario, chapel of, erected, vol. ii. [239](#).
 Superga, temple and other buildings erected
 on the hill of, vol. ii. [308](#).
 Valdagno, one at, vol. ii. [381](#).
 Valmontone. Cathedral of, vol. ii. [237](#).
 Venice. S. Antonio, vol. i. [166](#).
 S. Biagio Catoldo, monastery of, vol. i. [252](#).
 Della Carita, the house for the canons of,
 vol. ii. [33](#).
 ——— monument to the doge Nic-
 colo da Ponte, vol. ii. [94](#).
 Celestia, vol. ii. [95](#).
 S. Croce, vol. ii. [125](#).
 S. Fantino built, vol. i. [307](#).
 ——— a rich chapel erected in, vol. i. [308](#).
 S. Francesco della Vigna built, vol. i. [304](#).
 ——— façade to, vol. ii. [35](#).
 L Frari, or the Minor Brothers, vol. i. [150](#).
 S. Geminiano built, vol. i. [308](#).
 ——— statues in, mentioned, vol. i. [242](#).
 S. Giacomo, or St. James, in the Rialto,
 vol. i. [108](#).
 S. Giorgio, vol. i. [188](#).
 ——— Maggiore, and refectory of, vol.
 ii. [34](#).
 S. Giovanni, school of, vol. i. [307](#).
 ——— Evangelista, sepulchre of An-
 drea Bodoaro, vol. ii. [29](#).
 ——— Grisostomo, vol. i. [241](#).
 ——— e Paolo erected, vol. i. [240](#).
 ——— sepulchre of Leonardo
 Loredano, vol. ii. [29](#).
 S. Giovanni e Paolo, isolated altar in, vol. ii. [127](#).
 ——— rich in marbles, vol. i. [240](#).
 ——— chapel and altar of the
 Rosario, vol. ii. [128](#).
 S. Girolamo, the oratory of, vol. ii. [128](#).
 S. Giuliano, vol. ii. [128](#).
 Degli Incurabili, vol. i. [307](#).
 S. Lucia, vol. ii. [36](#).

- Churches. Venice. S. Marco, rebuilt, vol. [i. 139.](#)
 ————— bronze gates of, vol. [i. 308.](#)
 ————— sepulchres of cardinal Giambat-
 tista Zeno, vol. [i. 240.](#)
 ————— confraternita of, vol. [i. 241.](#)
 ————— tower which contains the bells,
 vol. [i. 242.](#)
 ————— tower in the square of, vol. [i. 240.](#)
 S. Martino, vol. [i. 307.](#)
 Mater Domini (S. Maria), vol. [i. 241.](#)
 Minor Brothers, vol. [i. 150.](#)
 La Misericordia, school of, vol. [i. 241, 304.](#)
 S. Pietro di Castello, vol. [ii. 30.](#)
 Il Redentore erected and described, vol. [ii. 35.](#)
 S. Rocca, and its statues, vol. [i. 242.](#)
 ————— façade and steps of the school of,
 vol. [i. 243.](#)
 S. Salvatore, its plan a patriarchal cross,
 vol. [i. 243.](#)
 ————— a sepulchre of the doge Vin-
 cero, vol. [i. 308.](#)
 ————— monuments of the Priuli, vol.
[ii. 128.](#)
 S. Sebastiano, a sepulchre of sig. Podaca-
 taro, vol. [i. 308.](#)
 S. Spirito, choir and façade of, erected,
 vol. [i. 307.](#)
 S. Zaccaria, vol. [i. 241.](#)
 Le Zittelle erected, vol. [ii. 36.](#)
- Verona. S. Anastasia, altar and sepulchre to Giano
 Tregoso, vol. [ii. 28.](#)
 S. Bernardino. Guareschi chapel built, vol. [i. 254.](#)
 Cathedral, bell-tower of, vol. [i. 255.](#)
 S. Georgio, the piers strengthened to support
 a cupola, vol. [i. 255.](#)
 S. Maria di Campagna, vol. [i. 255.](#)
 ————— Orgagno, façade of, vol. [i. 255.](#)
 S. Niccola, tabernacle of, vol. [ii. 239.](#)
 S. Paolo, in the Campo Marzo, vol. [ii. 358.](#)
 S. Tommaso, vol. [i. 257.](#)
- Vicenza. San Salvatore. The lantern of the cupola
 opened, vol. [ii. 93.](#)
 S. Gaetano, erected, vol. [ii. 237.](#)
 Araceli erected, vol. [ii. 240.](#)
 S. Orso, at the foot of Monte Summano,
 vol. [ii. 374.](#)

- Churches. Vicovaro, in the Papal States, one at, vol. ii. [330](#).
 Viterbo, in the Papal States. Dominican church and
 convent at, vol. [i](#). [151](#) ; vol. ii. [323](#).
 Volterra. Cathedral enlarged, vol. [i](#). [151](#).
 Urbino, in the Papal States. San Francesco built,
 vol. ii. [338](#).
 San Dominico, vol. ii. [338](#).
 Capitol at Rome, many public walks on, vol. [i](#). [90](#).
 Chimneys, their arrangement, vol. [i](#). lxii.
 China, mountains of, cut into various forms, vol. [i](#). [70](#).
 Great wall of, described, vol. [i](#). [100](#).
 Circus Maximus, at Rome, enlarged and ornamented, vol. [i](#). [94](#).
 Cloaca Maxima, at Rome, constructed, vol. [i](#). [75](#).
 Clusium, tomb at, vol. [i](#). [75](#).
 College at Alcala erected, vol. [i](#). [313](#).
 Bologna, of S. Lucia, vol. ii. [198](#).
 Chelsea, vol. ii. [286](#).
 Cambridge. Emanuel, Sidney, and Trinity, vol. ii.
 [159](#).
 Genoa, that of the Jesuits, vol. ii. [171](#).
 Hdefonso, founded by cardinal Ximenes, vol. [i](#). [313](#).
 Madrid, that of Donna Maria d' Arragona, vol. [i](#). [328](#).
 Oxford, vol. [i](#). [170](#).
 Christ College at, vol. [i](#). [178](#).
 Paris, of the Sorbonne erected, vol. ii. [238](#).
 Rome. One erected by Apollodorus, vol. [i](#). [94](#).
 Library belonging to one at, vol. ii. [339](#).
 Valenza, vol. [i](#). [342](#).
 Valladolid, of Santa Croce, vol. [i](#). [312](#).
 Winchester, vol. [i](#). [170](#).
 Colossus at Rhodes, the work of Chares, vol. [i](#). [45](#).
 Column, triumphal, one of Trajan at Rome, vol. [i](#). [94](#).
 restored, vol. ii. [83](#).
 ditto of Antoninus, at Rome, vol. [i](#). [103](#).
 restored, vol. ii. [83](#).
 Composite order, its proportions, xxvii.
 Parallel of, vol. ii. [118](#).
 Conduits. Aqua Virgine, at Rome, repaired, vol. [i](#). [193](#).
 Constantinople built, vol. [i](#). [105](#).
 The Calei palace at, vol. [i](#). [116](#).
 Mosque erected on the site of a church, vol. [i](#).
 [196](#).
 St. Sophia, vol. [i](#). [117](#), [120](#).
 Convenience defined, vol. [i](#). xlv.
 Convents. Cuença, Dominican one at, vol. [i](#). [199](#).
 Jesuits' at, vol. [i](#). [199](#).
 Madrid. Franciscan at, vol. [i](#). [344](#).
 Augustins', vol. [i](#). [344](#).
 Corinth, the Isthmus of, attempt to cut through, vol. [i](#). [87](#).

Corinthian order prevails at Balbec, vol. [i. 66.](#)
 its proportions, vol. [i. xxv.](#)
 parallel of, vol. ii. [110.](#)

Cupolas, or domes. Balbec, vol. [i. 62.](#)
 Florence. S. Mariè del Fiore, vol. [i. 180.](#)
 Loretto, vol. [i. 191.](#)
 ———— Madonna di, at Rome vol. [i. 211.](#)
 Naples, vol. [i. 224.](#)
 Pisa, vol. [i. 127.](#)
 S. Sofia, vol. [i. 117.](#)
 Vatican, vol. ii. [90.](#)
 Venice, vol. [i. 304.](#)

D.

Doors and windows, their proportions, vol. [i. lxi.](#)
 Doric order, its proportions, vol. [i. xxiii.](#)
 parallel of, vol. ii. [99.](#)

E.

Eurepos, in Persia, river embanked, vol. [i. 120.](#)
 Eurythmia, in what it consists, vol. [i. xliii.](#)

F.

Fortifications. Brescia, vol. [i. 251.](#)
 Belvidere, at Florence, vol. ii. [69.](#)
 Canaan, vol. [i. 251.](#)
 Cambray, vol. ii. [347.](#)
 Candia, vol. [i. 251.](#)
 Castello, vol. [i. 250.](#)
 Castro, vol. [i. 233.](#)
 Civita di Tronto, kingdom of Naples, vol. ii. [69.](#)
 Civita Vecchia, vol. [i. 197.](#)
 ———— various designs for, vol. [i. 232.](#)
 La Chiusa, vol. [i. 251.](#)
 Corfu, vol. [i. 251.](#)
 Corvietto, vol. [i. 197.](#)
 Cyprus, vol. [i. 251.](#)
 Ferrara, vol. ii. [197.](#)
 Lignago, vol. [i. 250.](#)
 Livorno, Fortezza Nuova at, vol. ii. [69.](#)
 Malta fortified, vol. [i. 248.](#)
 S. Miniato, at Florence, vol. [i. 273.](#)
 Napoli di Romania, vol. [i. 251.](#)
 Narni, vol. [i. 197.](#)
 San Niccolo, in the Port of Sebanico, vol. [i. 251.](#)
 of Ostia rebuilt, vol. [i. 210.](#)
 Orzi Nuovo, vol. [i. 250.](#)

- Fortifications. *Peschiera*, vol. [i](#) [251](#).
Placentia and *Parma*, vol. [i](#) [232](#).
Pistoja, vol. [ii](#). [69](#).
Porta Ferrajo, vol. [ii](#). [69](#).
Prato, vol. [ii](#). [69](#).
Retimo, vol. [i](#) [251](#).
Rome, bastions at, vol. [i](#) [234](#).
Sienna strengthened, vol. [i](#) [227](#).
Spoleti, vol. [i](#) [197](#).
Strasburgh, vol. [ii](#). [347](#).
Treviso, vol. [i](#) [238](#).
Verona, vol. [i](#) [250](#).
Zara, in *Dalmatia*, vol. [i](#) [251](#).
- Fortresses. *Ancona*, vol. [i](#) [233](#).
Arezzo, vol. [i](#) p. [213](#).
Ascoli erected with great rapidity, vol. [i](#) [234](#).
Ferrara, vol. [ii](#). [141](#).
Florence, vol. [i](#) [233](#).
Lido, in the port of *Venice*, vol. [i](#) [251](#).
Milan, vol. [ii](#). [197](#).
Montefiascone restored, vol. [i](#) [232](#).
Palma, near *Friuli*, vol. [ii](#). [95](#).
Perugia, vol. [i](#) [234](#); completed, vol. [ii](#). [1](#).
Portogallo, in *Spain*, vol. [ii](#). [54](#).
- Forum, or square.
Trajan, at *Rome*, vol. [i](#) [93](#).
Augustus restored, vol. [i](#) [99](#).
- Fountains. *Aquila*, called *La Rivera*, vol. [i](#) [146](#).
Assisi, vol. [i](#) [189](#).
Abano, described by *Theodoric*, vol. [i](#) [110](#).
Naples, *Medina* at, vol. [ii](#). [182](#).
Rome. *Campidoglio*, vol. [ii](#). [92](#).
S. Maria in *Trastevere*, vol. [ii](#). [264](#).
Navona Piazza, vol. [ii](#). [210](#).
S. Peter's, piazza of, vol. [ii](#). [264](#).
Public ones, [150](#) erected under the *Cæsars*,
vol. [i](#) [80](#).
Del Popolo, vol. [ii](#). [92](#).
Pantheon, vol. [ii](#). [92](#).
Strada Felice, vol. [ii](#). [82](#).
S. Pietro Montorio, vol. [ii](#). [265](#).
of *Trevi*, description of, vol. [ii](#). [323](#).
Sienna. Opposite the *Hotel de Ville*, vol. [i](#) [166](#).

G.

- Gardens. *England*, good taste displayed in, vol. [ii](#). [249](#).
Mondragone, vol. [ii](#). [201](#).
Marly, vol. [ii](#). [217](#).

- Gardens. Pinciana, villa of, vol. ii. [201](#).
Versailles, vol. ii. [247](#).
- Gates. Bologna, S. Michele in Bosco, vol. i. [227](#).
at Capua, vol. i. [150](#).
Denis, St., near Paris, vol. ii. [244](#).
Florence, S. Maria Novella, vol. i. [193](#).
Genoa, of the Old Mole, vol. ii. [3](#).
Germany, Wesel at, vol. ii. [260](#).
Haerlem, of the, vol. ii. [149](#).
Nuova, at Verona, vol. i. [253](#).
Del Pallio, at Verona, vol. i. [253](#).
Paris. St. Antoine at, vol. ii. [244](#).
Du Perou, vol. ii. [256](#).
Rome. Cancellaria, vol. ii. [83](#).
Numentana, now Porta Pia, vol. i. [287](#).
Del Popolo, vol. ii. [20](#).
Santo Spirito, vol. i. [234](#).
Vaccino Campo, rustic one, vol. ii. [20](#).
Vigna del Patriarca Grimani, vol. ii. [287](#).

H.

- Hospitals. Andalusia. San Giacomo e Baeza, vol. i. [323](#).
Ancona. Lazzaretto at, vol. ii. [338](#).
Bartholomew's, London, vol. ii. [297](#).
Convitto di Sacerdote, at Rome, vol. ii. [83](#).
Des Enfants Trouvés, at Paris, vol. ii. [327](#).
Giovanni Battista, vol. i. [329](#).
At Milan, vol. i. [187](#).
Naples, the Reclitorio, vol. ii. [365](#).
S. Spirito, in Sassia, vol. i. [198](#).
At Toledo, for foundlings, vol. i. [313](#).
At Venice, vol. i. [138](#).

L.

- Intercolumniations, how to proportion them, vol. i. [xxix](#).
Ionic order, its proportions, vol. i. [xxiv](#).
——— parallel of, vol. ii. [105](#).
Jerusalem, rebuilt by Adrian, vol. i. [100](#).
Justinian, an equestrian statue of, vol. i. [118](#).

L.

- Labyrinths. Of Egypt, described, vol. i. [12](#).
Crete, vol. i. [12](#), [13](#).
Lemnos, vol. i. [19](#).
Ida, vol. i. [13](#).
Laodicea, and other cities of Asia Minor built, vol. i. [103](#).

- Lakes. Mœris, vol. [i](#) [6](#).
 Fucino, one at, drained, vol. [i](#) [87](#).
 Lamps, perpetual, vol. [i](#) [31](#).
 Libraries. Magnificent one added to the Temple of Serapis,
 vol. [i](#) [73](#).
 In Ethiopia, vol. [i](#) [74](#).
 England, vol. [i](#) [177](#) ; vol. ii. 296.
 Florence. Medicean one, vol. [i](#) [273](#).
 Rome. Public ones, vol. [i](#) [80](#), [94](#).
 Vatican, vol. [i](#) [205](#) ; vol. ii. [82](#).
 Minerva, vol. ii. [265](#).
 Venice. St. Mark at, vol. [i](#) [304](#) ; vol. ii. [94](#).
 Others founded, vol. [i](#) [188](#).
 Lizard and frog carved on the pedestal of a column, vol. [i](#) [77](#).
 Loadstone. The interior of a temple intended to be cased with,
 vol. [i](#) [71](#).
 Loggia. Marco Coscia, at Rome, vol. [i](#) [303](#).

M.

- Machines. Used to transport the stone to the Temple of Diana
 at Ephesus, vol. [i](#) [23](#).
 A work on, by Anthemius, vol. [i](#) [119](#).
 Curious one at Milan, resembling a lion, vol. [i](#) [214](#).
 Mausoleum of Hadrian at Rome, vol. [i](#) [99](#).
 ————— altered, vol. [i](#) [213](#).
 at Halicarnassus described, vol. [i](#) [55](#).
 of Julius II. at St. Peter's, vol. [i](#) [265](#), [275](#).
 at Venice, of the Cornaro family, vol. [i](#) [246](#).
 Medals, useful in discovering the names of architects, vol. [i](#) [79](#).
 Mediterranean and Black Sea, idea of uniting, vol. [i](#) [123](#).
 Merida, a Roman city in Spain, walls, &c. of, vol. [i](#) [98](#).
 Military architecture, as now practised, when invented, vol. [i](#)
 [250](#).
 Mœris, the lake of, dimensions, vol. [i](#) [6](#).
 Mortar, when first used, vol. [i](#) [16](#).
 Mosques at Constantinople, vol. [i](#) [119](#).
 at Cadova, formed out of a temple, vol. [i](#) [121](#).
 at Tunis, vol. ii. [256](#).

N.

- Names. Those of architects given sometimes to buildings,
 vol. [i](#) [82](#).
 Nepi, the streets of, raised, vol. [i](#) [234](#).
 Nero. Golden house at Rome, vol. [i](#) [87](#), [99](#).
 Ordnained many wise regulations for building, vol. [i](#) [88](#).
 Fish-ponds of, vol. [i](#) [111](#).

- Nicomedia, a bath at, vol. [i. 92.](#)
 Nile, the river turned, vol. [i. 72.](#)
 Niches and statues, how proportioned, vol. [i. 1.](#)
 Nineveh founded by king Ninus, vol. [i. 1.](#)

O.

- Obelisks. An account of the manner of conveying one, vol. [i. 71.](#)
 Forty-eight at Rome, vol. [i. 81.](#)
 The large one in the square of St. Peter's raised,
 vol. [ii. 73.](#)
 In the Piazza del Popolo, S. Maria Maggiore, and
 Giovanni Laterano, raised, vol. [ii. 81.](#)
 Odeum at Athens, designed by Pericles, vol. [i. 43.](#)
 Orders, above one another, vol. [i. xxxii.](#)
 ——— use of in the exterior, vol. [i. xlv.](#)
 ——— in the interior, vol. [i. xlvi.](#)
 Ostia, port of, constructed, vol. [i. 87.](#)

P.

- Painting, vol. [i. liii.](#)
 Palaces. Ancient. Babylon, vol. [i. 1.](#)
 Balbec, ruins of one remaining, vol. [i. 64.](#)
 Cæsars, at Rome, Golden House, built by Nero,
 vol. [i. 87.](#)
 ——— by Domitian, vol. [i. 90.](#)
 Dendera, in Egypt, [vol. i. 5.](#)
 Palmira, vol. [i. 66.](#)
 Persepolis, vol. [i. 8.](#)
 Sedir, in Arabia, vol. [i. 107.](#)
 Spalatro, vol. [i. 104.](#)
 Alpiero, for count, of Schio, vol. [ii. 371.](#)
 Ancona, in the Papal States.
 Ciriaco, vol. [i. 152.](#)
 Aquilla, in the kingdom of Naples.
 Public palace at, vol. [ii. 56.](#)
 Antonelli, vol. [ii. 270.](#)
 Quinzi, vol. [ii. 270.](#)
 Arcugnano, for the Franciscans, vol. [ii. 371.](#)
 Aversa, Palombo at Cesa, erected, vol. [ii. 336.](#)
 Bassano, at Rossano, near, vol. [ii. 379.](#)
 Bologna Bocchi, Achille, vol. [ii. 17.](#)
 Institute, finished, vol. [ii. 10.](#)
 Magnani, vol. [ii. 64.](#)
 Malvezzi, vol. [i. 347.](#)
 Monte, magnificent gallery of, vol. [ii. 246.](#)
 Poggi, vol. [ii. 62.](#)
 Publico, great gate of, vol. [ii. 9.](#)

- Palaces, Brescia, the public hall, vol. ii. [342](#).
 Casciano Corsini, villa of, vol. ii. [70](#).
 Caserta, royal one at, erected, vol. ii. [341](#).
 ——— described, vol. ii. [343](#).
 Castel-Franco, in Trevigiana Cornaro, vol. ii. [371](#).
 Castellaro, one at, vol. ii. [359](#).
- England. Amesbury, vol. ii. [164](#).
 Audley End, vol. ii. [160](#).
 Blenheim, in Oxfordshire, vol. ii. [291](#).
 Bolsover, vol. ii. [160](#).
 Brympton, vol. ii. [165](#).
 Cary House, at Roehampton, vol. ii. [291](#).
 Cashiobury, in Hertfordshire, vol. ii. [165](#).
 Castle Howard, in Yorkshire, vol. ii. [292](#).
 ——— Ashby, vol. ii. [165](#).
 Charlcot House, vol. ii. [159](#).
 Chatsworth, erected, vol. ii. [289](#).
 Chelsea College, vol. ii. [286](#).
 Chevening, Kent, vol. ii. [165](#).
 Chilham Castle, Kent, vol. ii. [165](#).
 Chiswick, vol. ii. [296](#).
 Clarendon Printing Office, Oxford, vol. ii. [293](#).
 Cliefden, Buckinghamshire, vol. ii. [291](#).
 Cobham Hall, Kent, vol. ii. [165](#).
 Coleshill, Berkshire, vol. ii. [165](#).
 Duncombe House, in Yorkshire, vol. ii. [293](#).
 Dynham, in the county of Gloucester, vol. ii. [290](#).
 Eastbury, in Dorsetshire, vol. ii. [293](#).
 Easton Neston, in Northamptonshire, vol. ii. [288](#).
 Ely, the bishop's palace at, vol. i. [173](#).
 Esher, Mr. Pelham's at, vol. ii. [384](#).
 Foley House, in Herefordshire, vol. ii. [293](#).
 Grange, in Hampshire, vol. ii. [165](#).
 Grimsthorp, vol. ii. [293](#).
 Greenwich, vol. ii. [163](#), [286](#), [384](#).
 Gunnesbury, vol. ii. [162](#).
 Hampton Court, vol. ii. [286](#).
 Heriot's Hospital, in Edinburgh, vol. ii. [165](#).
 Hethrop, vol. ii. [291](#).
 Hinton St. George, Somersetshire, vol. ii. [165](#).
 Holkham, the earl of Leicester's at, vol. ii. [384](#).
 Holmby House, vol. ii. [159](#).
 Holyrood House, Edinburgh, vol. ii. [165](#).
 Hopetoun, vol. ii. [290](#).
 Houghton, vol. ii. [294](#).
 Judde House, Kent, vol. ii. [165](#).

- Palaces. England. King's Weston, near Bristol, vol. ii. [293](#).
 ——— College, Cambridge, quadrangle of,
 vol. ii. [297](#).
 Lambeth, archbishop's palace at, vol. i. [173](#).
 Lee Court, Kent, vol. ii. [165](#).
 London. Barber's Hall, in Monkwell-street, vol. i.
 Buckingham House, vol. ii. [293](#).
 Exchange, Royal, vol. ii. [164](#).
 Horseguards, Barracks, &c. vol. ii. [384](#).
 Lincoln's Inn Fields, Lindsey House at,
 vol. ii. [163](#).
 Marlborough House, vol. ii. [286](#).
 Monument, on Fish-street-hill, vol. ii.
[286](#).
 Northumberland House, vol. ii. [160](#).
 Physicians' College, Warwick-lane,
 vol. ii. [286](#).
 Shaftesbury House, east side of Aldersgate-street.
 Somerset, vol. ii. [159](#).
 Wade's, Gen., in Cork-street, vol. ii. [295](#).
 Marble Hill, near Twickenham, vol. ii. [294](#).
 Mereworth, in Kent, vol. ii. [295](#), [384](#).
 Newmarket, design for a palace at, vol. ii. [165](#).
 Oatlands, vol. ii. [165](#).
 Petersham, lord Harrington's, vol. ii. [296](#).
 Sion House, Middlesex, vol. ii. [165](#).
 Stoke Park, Northamptonshire, vol. ii. [165](#).
 Storyhurst, vol. ii. [165](#).
 Thoresby House, vol. ii. [289](#).
 Trinity College, Cambridge, vol. ii. [286](#).
 Waller House, vol. ii. [165](#).
 Wanstead House, Essex, vol. ii. [384](#).
 Wollaton Hall, vol. ii. [159](#).
 Whitehall, Banqueting-room, vol. ii. [162](#).
 ——— duke of Richmond's, vol. ii. [296](#).
 Wilton, belonging to the earl of Pembroke,
 vol. ii. [158](#), [164](#), [294](#).
 Wing, in Buckinghamshire, vol. ii. [165](#).
 Welbeck, vol. i. [160](#).
 Winchester, royal palace at, vol. ii. [286](#).
 York, Assembly Room at, vol. ii. [296](#).
- Florence, and its vicinity.
 Albizzi, restored, vol. ii. [171](#).
 Archbishop's, constructed, vol. ii. [58](#).
 Artimino, villa of, vol. ii. [68](#).
 Bardi, at Verbelleza, vol. ii. [172](#).
 Bartolini. This was the first palace that had
 windows decorated with pediments, vol. i.
[222](#).

- Palaces. Florence. Caffagiulo, vol. [i](#) [189](#).
 Capponi, formerly Marignolle, vol. ii. [68](#),
[171](#).
 Carregi, villa of, vol. [i](#) [189](#).
 Cassino, behind S. Marco, vol. ii. [68](#).
 Castello, villa improved, vol. ii. [68](#).
 Corsini, formerly Acciajuoli, vol. ii. [68](#).
 Council hall, superior to any in Italy, vol. [i](#)
[216](#).
 Dardinelli, vol. ii. [71](#).
 Ducal, enlarged, vol. [i](#) [166](#).
 Fiesole, vol. [i](#) [189](#).
 Fornaquinci, loggia of, vol. ii. [147](#).
 Galleria, belonging to the piazza, vol. ii. [68](#).
 Gondi, vol. [i](#) [212](#).
 Gianfigliuzzi, vol. ii. [172](#).
 Guadagni, villa della Falle, vol. ii. [172](#).
 Imperiale, villa, vol. ii. [155](#).
 Marco S.
 Martelli, façade of, vol. ii. [68](#).
 Marucelli, vol. ii. [70](#), [171](#).
 Poggio Imperiale, vol. [i](#) [211](#) ; vol. ii. [70](#).
 Petraja improved, vol. ii. [68](#).
 Piazza, façade, vol. ii. [68](#).
 Pitti, vol. [i](#) [185](#), [187](#).
 — continued, vol. ii. [47](#), [170](#), [171](#).
 Pratolino, villa of, vol. ii. [68](#).
 Renuccini, vol. ii. [148](#).
 Riccardi, vol. [i](#) [188](#).
 ——— garden of, vol. [i](#) [222](#).
 ——— façade of, vol. ii. [68](#).
 Ruccelai, Doric façade, Corinthian galleries,
 &c., vol. [i](#) [193](#).
 Salviati, a Casino in Pinti, vol. ii. [172](#).
 Scarlatti, vol. ii. [170](#).
 Strozzi, vol. [i](#) [191](#).
 ——— continued, vol. [i](#) [215](#).
 ——— façade of, vol. ii. [68](#).
 ——— entablature of, vol. [i](#) [216](#).
 ——— second floor of, vol. ii. [96](#).
 ——— court of, vol. ii. [147](#).
 ——— staircase at, vol. ii. [71](#).
 Tornabuoni, vol. [i](#) [189](#).
 Vecchio, vol. [i](#) [188](#).
 Uffizj, vol. ii. [25](#).
 ——— finished, vol. ii. [70](#).
 Uggozioni, now Pandolfini, vol. [i](#) [219](#).
 France. Berny, in Normandy, vol. ii. [178](#).
 Baleroy, vol. ii. [178](#).
 Bois, vol. ii. [178](#).

- Palaces. France. Cambray, vol. ii. [347](#).
 Marseilles, vol. ii. [234](#).
 Meudon, vol. i. [350](#).
 Nancy, vol. ii. [326](#), [327](#).
 Paris, and its neighbourhood.
 Argenson built, vol. ii. [327](#).
 Auvergne, staircase of, vol. ii. [332](#).
 Beauvais, Rue St. Antoine, vol. ii. [255](#).
 Balaine, vol. ii. [332](#).
 Beauvilliers, vol. ii. [181](#).
 Bouillon, vol. ii. [178](#).
 Carnavaler, vol. i. [348](#).
 Chambord, vol. ii. [17](#).
 Choissy sur Seine, vol. ii. [178](#), [306](#).
 Colbert, vol. ii. [194](#).
 Cloud, Saint, wings added to, vol. ii. [252](#), [255](#).
 Cyr, Saint, vol. ii. [252](#).
 Clugny, vol. ii. [250](#).
 Condé, vol. ii. [178](#).
 Etrées, vol. ii. [298](#).
 Ecole Militaire erected, vol. ii. [306](#).
 Fermes Générales, vol. ii. [58](#).
 Frescati, vol. ii. [298](#).
 Fontainebleau, vol. i. [349](#).
 Gèvres, Rue Neuve, St. Augustin, vol. ii. [255](#).
 — en Brie, vol. ii. [178](#).
 Hensselin, vol. ii. [194](#).
 Justice, vol. ii. [146](#).
 Lionne, Vau le Vicomte, vol. ii. [194](#).
 Livry, vol. ii. [194](#).
 Louvre, vol. ii. [173](#), [194](#), [215](#).
 — gallery of, vol. ii. [58](#).
 — façade towards the river erected,
 vol. ii. [228](#).
 Luynes, vol. ii. [181](#).
 Laigle, vol. ii. [181](#).
 Lambert, vol. ii. [194](#).
 Luxembourg, vol. ii. [145](#).
 —, gates to, vol. ii. [327](#).
 Maine, vol. ii. [298](#).
 Marly, vol. ii. [250](#).
 Mayenne, vol. ii. [58](#).
 Mortemar, vol. ii. [255](#).
 Montmorency built, vol. ii. [327](#).
 Observatory, vol. ii. [229](#).
 Palais Royal, vol. ii. [237](#), [252](#).
 Pons, Rue St. Domenique, vol. ii. [194](#).
 Richlieu, vol. ii. [178](#), [237](#), [332](#).
 Soissons, vol. i. [350](#).
 Soubise, internal decorations of, vol. ii. [328](#).

Palaces. France. Paris, and its neighbourhood.

- Sully, vol. ii. [57](#).
- Torneille, vol. i. [347](#).
- Trianon, vol. ii. [250](#), [298](#).
- Thuilleries, vol. i. [350](#).
- enlarged, vol. ii. [193](#).
- Vau le Vicomte, vol. ii. [194](#).
- Vaugirard, vol. ii. [332](#).
- Versailles, vol. ii. [247](#).
- Vrilliere, vol. ii. [178](#).
- Toulon, vol. ii. [242](#).
- Toulouse, Blezancourt, vol. ii. [178](#).
- Touraine, Chavigny, vol. ii. [181](#).
- Versailles, vol. ii. [250](#).
- de Clugny, vol. ii. [250](#).
- Verdun, bishop's at, vol. ii. [298](#).

Frascati, near Rome.

- Aldobrandini, called the Belvidere, vol. ii. [92](#).
- Mondragone, vol. ii. [143](#).
- Rufina, vol. ii. [190](#).
- Ruffinella, repaired, vol. ii. [339](#).
- Taverna, villa of, belonging to the Borghese, vol. ii. [198](#).
- Visconti, and villa, vol. ii. [265](#).

Frata, (in the Polisane.)

- Bandoero, vol. ii. [41](#).

Friuli. Tacea in Portogruaro, vol. i. [244](#).

- Usopo, castle of, for Savorgnano, vol. i. [246](#).

Genoa and its vicinity.

- Aderno, vol. ii. [4](#).
- Balbi, vol. ii. [171](#).
- Campetto, imperial palace of, vol. ii. [66](#).
- Centurione, vol. ii. [4](#).
- Doge of the, vol. ii. [11](#), [12](#).
- Doria Tursi, in the Strada Nuova, vol. ii. [52](#).
- Giustiniani, at Albaro, vol. ii. [7](#).
- Grimaldi, vol. ii. [4](#).
- della Rocca, vol. ii. [6](#).
- Imperiali Lercari, vol. ii. [4](#), [6](#).
- [Lercari](#), vol. ii. [6](#).
- [Lomellini](#), vol. ii. [4](#).
- Palavecino, vol. ii. [4](#).
- above Zerbino, vol. ii. [7](#).
- Ravaschieri, vol. ii. [96](#).
- Salvago, afterwards Spinola, now Serra, vol. ii. [4](#).
- Saoli, vol. ii. [4](#).
- Serra, vol. ii. [4](#), [155](#).
- Spinola, vol. ii. [6](#).
- Arquata, vol. ii. [4](#).

- Palaces. Germany. Metz, bishop of Strasbourgh's, vol. ii. [298](#).
 Saltzbouurg, bishop's at, vol. ii. [301](#).
 Strasbourg, bishop's at, vol. ii. [298](#).
 Vienna, Cancellaria di Bohemia, vol. ii. [301](#).
 Eugene, vol. ii. [301](#).
 Lichtenstein, vol. ii. [258](#).
 Royal stable at, vol. ii. [256](#), [301](#).
 Schoenbrunn, vol. ii. [299](#).
 Trauthson, vol. ii. [301](#).
 Wurtzbouurg, episcopal one at, vol. ii. [327](#).
 Holland. Amsterdam, city palace of, vol. ii. [186](#).
 Brussels, hunting seat for the electors, vol. ii. [326](#).
 Hague, for Prince Maurice of Nassau, vol. ii. [187](#).
 Luneville, vol. ii. [326](#).
 Lamporecchio, for Clement IX., vol. ii. [236](#).
 Loretto, of the canons, vol. i. [218](#).
 Malcontenta. Foscari, Francesco, on the river, vol. ii. [32](#).
 Mantua. Bishop's palace at, vol. i. [247](#).
 Ducal, modernised, vol. i. [300](#) ; vol. ii. [262](#).
 Marmiruolo, vol. i. [301](#).
 T. del, so called, vol. i. [300](#).
 Maser (in the Marca Trevigiana.)
 Barbaro, Marc Antonio, vol. ii. [37](#).
 Manini, Count of, vol. ii. [41](#).
 Melido (in the country near Vicenza.)
 Trissini, vol. ii. [38](#).
 Messina, a palace near the gate of, vol. ii. [308](#).
 Milan, archducal, vol. ii. [342](#).
 Marini di Tommaso, vol. ii. [10](#).
 Modena, public one at, vol. ii. [198](#).
 Montagnana. Pisani, vol. ii. [41](#).
 Monte Oliveto.
 Strozzi, vol. ii. [70](#).
 Motti, (in the Friuli.)
 Zeno, vol. ii. [41](#).
 Naples. Balzo, now the Bank, vol. i. [168](#).
 Riccia, belonging to Bartolomeo of Capua, vol. i. [192](#).
 Buono Santo, or Caraccioli, vol. i. [191](#).
 Calabritto, at Chiaja, vol. ii. [342](#).
 Campolieto, Casino at Resina, vol. ii. [342](#).
 Cantalupo, on the river Pasilippo, vol. i. [226](#).
 Caramanica, vol. ii. [365](#).
 Caravita, near Portici, vol. ii. [321](#).
 Capuana, converted into a tribunal of justice, vol. i. [310](#).

- Palaces. Naples. Carivita, at Portici, vol. ii. [321](#).
 Caserta, vol. ii. [341](#), [343](#).
 Colombrano, vol. i. [152](#).
 Filomarini, fine example of the ponderous style, vol. i. [225](#).
 Gensana, at Fontana Medina, vol. ii. [342](#).
 Giordani, opposite Spedaletto, vol. ii. [365](#).
 Jaci, at Resina, near Portici, vol. ii. [366](#).
 Mataloni, the great gate and staircase of, vol. ii. [182](#).
 Monteleone enlarged, vol. ii. [318](#).
 Nunziatura, vol. ii. [245](#).
 Orsini, another story added, vol. i. [225](#).
 Poggio Reale, vol. i. [190](#).
 Portici, royal one at, vol. ii. [322](#).
 ——— Supino at, vol. ii. [336](#).
 Porto Nuovo, near S. Giuseppe, vol. ii. [322](#).
 Pozzuoli, vol. i. [330](#).
 Reale, vol. ii. [84](#).
 Sanseverino, vol. i. [224](#).
 Serra, vol. ii. [318](#).
 San Severo, vol. i. [310](#).
 Spirito Santo, Doric colonnade at, vol. ii. [341](#).
 Tarsia, vol. ii. [321](#).
 Teora, at Chiaja, vol. ii. [342](#).
 Torre, vol. i. [310](#).
- Padova, or Padua.
 Abriani, vol. ii. [370](#).
 Aldrighetti, vol. ii. [370](#).
 Borgo di Santa Croce, vol. ii. [40](#).
 Capitano, vol. ii. [136](#).
 Cornaro, near Santo, vol. i. [245](#).
 Council hall, vol. i. [307](#); vol. ii. [125](#).
 S. Giovanni, and Savonarola, gates of, vol. i. [245](#).
 Governor of the, vol. i. [245](#).
 Observatory at, vol. ii. [369](#).
 Casino near, for Medico Aquapendente, vol. ii. [57](#).
 Molino, vol. ii. [370](#).
- Parma, of the duke, vol. ii. [198](#).
 Colorno, villa of, for the duke Ranuccio, vol. ii. [261](#).
- Peretola, villa of, of an octangular form, vol. ii. [70](#).
 Perugia. Castiglione, on the lake, belonging to the duke della Corgna, vol. ii. [10](#).
 Pesaro, Urbino's, duke of, vol. i. [247](#), [248](#).
 Piacenza, Publicco, vol. ii. [198](#).
 Piombino, Cornari, vol. ii. [41](#).
 Pisa, of the grand duke, vol. ii. 68.

- Palaces. Pistoja. Sapienza, vol. ii. [172](#).
 Racconigi. Carignano, vol. ii. [239](#).
 Resina. Campolieto casino, vol. ii. [342](#).
 Rome, and its vicinity.
 Academy of France, vol. ii. [201](#).
 Albani, formerly Mattei, vol. ii. [83](#).
 Altamps, a court at, rebuilt in a simple and noble style, vol. ii. [229](#).
 Altieri at Gesu erected, vol. ii. [233](#).
 ————— rustic gate at, vol. ii. [236](#).
 Astalli, at the foot of the Campidoglio, erected, vol. ii. [234](#).
 Barberini, vol. ii. [141](#), [190](#).
 Belvidere, at the Vatican, some whimsical staircases in, vol. ii. [16](#).
 Bolognetti, vol. ii. [264](#).
 Bonelli piazza, S. Apostoli, vol. ii. [136](#).
 Borghese, began, vol. ii. [131](#) ; finished, [141](#).
 Bracciano, formerly S. Apostoli, vol. ii. [214](#).
 Campidoglio, erected and described, vol. i. [208](#) ; vol. ii. [91](#), [198](#).
 ————— Conservatori erected, vol. i. [281](#).
 ————— windows of, vol. i. [297](#).
 ————— wall on the declivity erected, vol. i. [282](#).
 Cancellaria, the principal part erected, vol. i. [204](#).
 Caprarola, at Viterbo, vol. ii. [21](#).
 Cenci, in the Piazza S. Eustachio, erected, vol. i. [300](#).
 Cicciaporci, in Strada di Banchi, erected, vol. i. [300](#).
 Consulta, vol. ii. [362](#).
 Colonna, vol. ii. [142](#).
 Corsini, at the Lungara, vol. ii. [364](#).
 Croce Santa, now the Monte della Pietà, vol. ii. [58](#).
 Dataria, near Piazza Madama, vol. ii. [148](#).
 Dogana, or custom-house at Ripa Grande, vol. ii. [237](#).
 Falconieri modernised, vol. ii. [190](#).
 Farnese, commenced and continued to the cornice, vol. i. [235](#) ; vol. ii. [19](#).
 ————— cornice of, designed and executed, vol. i. [282](#).
 Firenze, or Florence, palace for the Signori de Monti, vol. ii. [19](#).
 Gaetani, on the Corso, staircase at, vol. ii. [135](#).
 Giovanni Laterano, vol. ii. [81](#).
 Giraud, vol. i. [204](#).
 Giustiniani, vol. ii. [87](#).

- Palaces. Rome. Giustiniani, villa of, without the Porto del Popolo, vol. ii. [145](#).
 Gottofredi, in the Piazza of Venice, vol. ii. [92](#).
 Grimani, Strada Rosella, vol. ii. [264](#).
 Lancellotti, vol. ii. [16](#), [52](#), [141](#).
 ———— great door of, vol. ii. [153](#).
 Lante, on the Pietro Montorio, vol. i. [300](#).
 Lodovisi, villa of, vol. ii. [153](#).
 Madama, villa of, erected, vol. i. [300](#).
 Marescotti, vol. ii. [92](#).
 Mattei erected, vol. ii. [141](#).
 ——— villa of, near S. Stefano Rotondo, vol. i. [298](#).
 Monte Cavallo, portico of, vol. ii. [58](#).
 ——— Tower of the Winds at, vol. ii. [131](#).
 ——— building finished, vol. ii. [141](#).
 ——— of the consul at, vol. ii. [362](#).
 ——— Citorio, vol. ii. [237](#).
 ———— finished, vol. ii. [265](#).
 ——— Curia Innocenziana at, vol. ii. [211](#).
 Muti, at the foot of the Campidoglio, vol. ii. [234](#).
 Negroni, near S. Maria Maggiore, vol. ii. [72](#).
 Niccolini, formerly Gaddi, vol. i. [303](#).
 ——— in the Piazza Collonna, vol. ii. [92](#).
 Parma, vol. i. [232](#).
 Pamfilj, on the Monte Magnanapoli, formerly the Vitelli, vol. ii. [144](#).
 ——— at the Fontana di Trevi, vol. i. [297](#); vol. ii. [183](#).
 ———— façade of, vol. ii. [190](#), [198](#).
 Papa Giulio, villa of, described, vol. ii. [18](#), [24](#).
 Parma, near the gate of Venice, vol. i. [232](#).
 Pasquino di Santo Buono, vol. i. [232](#).
 Pietro in Vincoli, vol. i. [211](#).
 Petronj, vol. ii. [364](#).
 Propaganda, vol. ii. [206](#).
 Quirinal, vol. ii. [82](#).
 Raffaello d' Urbino, taken down, vol. i. [207](#).
 Renuccini, formerly d'Aste, on the Corso, vol. ii. [232](#).
 Ricci, in the Strada Giulia, vol. i. [287](#).
 Rocco, S., design for, vol. i. [284](#).
 Ruspoli, or Gaetani, or Rucellai, in the Corso, vol. ii. [49](#).
 Sacchetti built and enlarged, vol. i. [234](#).
 Sagripante, vol. ii. [49](#).
 Salviati, vol. i. [287](#), [223](#).
 Sapienza, vol. ii. [92](#).
 Sciarra Colonna erected, vol. ii. [142](#).

- Palaces. Rome. Serlupi, next the Seminario Romano, vol. ii. [91](#).
 Simonetti, formerly de Carolis, vol. ii. [270](#).
 Sora, vol. i. [204](#).
 Spada, in the Corso, opposite the column of Antonine, vol. ii. [92](#).
 ——— near the Farnese, embellished, vol. ii. [190](#).
 Spagna, vol. ii. [190](#).
 Spirito, [S.](#), façade of, vol. ii. [59](#).
 Stoppani, formerly Caffarelli, vol. i. [219](#).
 Strozzi modernised, vol. ii. [141](#).
 ——— small palace near Villa Negroni, vol. i. [298](#).
 Vatican, vol. i. [190](#), [204](#); vol. ii. [82](#).
 ——— some rooms in the Loggias repaired, vol. i. [232](#).
 ——— court in front of, built, vol. i. [232](#).
 ——— enlarged with chambers, for the papal consistories, vol. i. [233](#).
 ——— the whole nearly rebuilt, vol. i. [234](#).
 ——— casino at, vol. ii. [265](#).
 Verospi, in the Corso, vol. ii. [133](#).
- Spain. Alcala, belonging to the archbishop, vol. i. [322](#).
 Aranjuez, royal pleasure-house at, vol. i. [340](#).
 Escorial built, vol. i. [330](#); vol. ii. [61](#).
 — — — Fresneda, vol. i. [338](#).
 ——— Pantheon at, vol. i. [344](#).
 Granada, royal one at, vol. i. [327](#).
 Madrid, old one at, vol. i. [321](#).
 ——— rebuilt, vol. ii. [313](#).
 ——— Los Consejos, superb edifice, vol. i. [343](#).
 ——— S. Ildenfonso, façade of, vol. ii. [311](#).
 ——— Buen Retiro, vol. i. [345](#).
 ——— Riofrio, pleasure-house at, vol. ii. [312](#).
 Oviedo, royal at, vol. i. [132](#).
 ——— Pardo, vol. ii. [317](#).
 Toledo, Alcazar, the façade of, vol. i. [319](#).
 ——— Ayuntamiento, vol. i. [328](#).
 Uheda, for Don Francesco de los Cobos, vol. i. [323](#).
- Sienna, hall of the grand council, vol. i. [166](#).
 Magistrates, vol. i. [165](#).
 Publico, or public palace, vol. i. [166](#); vol. ii. [69](#).
- Stra, Bernardo, vol. ii. [41](#).
- Turin, Birago di Borghe, belonging to the lieutenant-general, vol. ii. [310](#).
 Carignano, vol. ii. [239](#).
 Filiberto of Savoy, vol. ii. [239](#).
 Stopinigi, curious plan of, vol. ii. [309](#).
 Veneria, royal villa of; chapel to, vol. ii. [309](#).
- Vancimuggio (five miles from Vicenza.)
 Barbaro, Marc Antonio, vol. ii. [40](#).

- Palaces. Venegazzu, in Trivigiano. Spineda, vol. ii. [382](#).
 Venice. Balbi, near the great canal, vol. ii. [129](#).
 Camerlinghi, public palace near the Rialto, vol. [i](#). [244](#).
 Cornari, at S. Paolo, vol. [i](#). [252](#).
 ——— on the grand canal at S. Maurizio, vol. [i](#). [306](#).
 Delfino, near S. Salvatore, vol. [i](#). [307](#).
 Ducal, vol. ii. [125](#).
 Gradenigo, vol. [i](#). [244](#).
 Grimani, near S. Luca, vol. [i](#). [252](#).
 Procurazie, the old one erected, vol. [i](#). [242](#).
 Squittinio, hall of, vol. ii. [125](#).
 Trevisani, at S. Maria Formosa, vol. [i](#). [244](#).
 Vendramini, vol. [i](#). [244](#).
 Zecca, or mint, vol. [i](#). [304](#).
 Verona. Bevilacqua, façade of, vol. [i](#). [256](#).
 Canossa, latterly much altered, vol. [i](#). [255](#).
 Exchange, vol. ii. [357](#).
 Giuliani, vol. ii. [357](#).
 Gran-Guarda, on the Bra, vol. [i](#). [256](#).
 Palace of Justice, gate of, vol. [i](#). [257](#).
 Pellegrini, the door of, much admired, vol. [i](#). [256](#).
 Pindimonti, in the village of Vo, vol. ii. [357](#).
 Pompeii well designed, vol. [i](#). [257](#); vol. ii. [357](#).
 Pretorio, gate of, rebuilt, vol. [i](#). [257](#).
 Spolverini, vol. ii. [358](#).
 Verzi, vol. [i](#). [256](#).
 Vicenza. Barbarano, vol. ii. [40](#).
 Bonini, in the Strada di Porta Nuova, vol. ii. [372](#).
 Caldagno, vol. ii. [40](#).
 Capra, Rotunda del, vol. ii. [40](#).
 Chiericati, vol. ii. [39](#).
 Cordellina, in Strada Reale, vol. ii. [373](#).
 Godi, vol. ii. [40](#).
 Palladio, his own residence, vol. ii. [39](#).
 Pioveni, vol. ii. [40](#).
 Pojana, vol. ii. [40](#).
 Ragione described, vol. ii. [31](#).
 Schio, at San Marco, vol. ii. [40](#).
 Tiene, in the Strada Stephano, vol. ii. [32](#), [40](#).
 ——— at the Porto del Castello, vol. ii. [40](#).
 Trissino, at Cricoli, vol. ii. [30](#).
 ——— on the Corso, vol. ii. [96](#).
 ——— villa of, vol. ii. [359](#).
 Trento, formerly the Trissino, vol. ii. [96](#).

- R.

- GG

S.

- Sail, the use and invention of, vol. [i](#) [13](#).
 Salamanca, a town in Spain, rebuilt, vol. [i](#) [134](#).
 Saw, and other tools, first made use of, vol. [i](#) [14](#).
 Scull of Raphael preserved in S. Luke's, at Rome, vol. [i](#) [221](#).
 Sculpture, vol. [i](#) li.
 Scene painting, as now practised, origin of, vol. [i](#) [229](#).
 Segovia, a town in Spain, vol. [i](#) [134](#).
 Sepulchres at Palmyra, vol. [i](#) [68](#).
 ——— Malatesta family at Rimini, vol. [i](#) [195](#).
 Septizonium, at Rome, erected, vol. [i](#) [104](#).
 Seville, arsenal at, vol. [i](#) [154](#).
 Siene, in Egypt, vol. [i](#) [5](#).
 Solidity, as relating to building, vol. [i](#) lx.
 Spalatro, vol. [i](#) [104](#).
 Stadium, situation of a Greek one, vol. [i](#) [37](#).
 Stables, near the Farnese palace, Rome, vol. [i](#) [219](#).
 Staircases, vol. [i](#) lix.
 Symmetry, in what it consists, vol. [i](#) xxxiii.
 Statues, invention of legs to, vol. [i](#) [13](#).
 at Athens, by Phidias, vol. [i](#) [47](#).
 ——— of Victory at, vol. [i](#) [47](#).
 ——— of Minerva Medica at, vol. [i](#) [52](#).
 ——— of Splanchnoptes at, vol. [i](#) [52](#).
 Apollo, in the Zecca at Venice, vol. ii. [28](#).
 ——— in the isle of Delos, vol. [i](#) [15](#).
 at Bologna, of Julius II. at St. Petronio, vol. [i](#) [268](#).
 Egypt, [2,500](#) statues taken into, vol. [i](#) [74](#).
 Olympia, one of cedar, in the treasury at, vol. [i](#) [55](#).
 at Paris, Henry IV. on the Pont Neuf, vol. ii. [147](#).
 at Rome, an ancient Faun, vol. [i](#) [260](#).
 ——— [100,000](#) mentioned as being at, vol. [i](#) [80](#), [81](#),
 [112](#).
 ——— of Hercules, in marble, vol. [i](#) [261](#).
 ——— of Cupid, vol. [i](#) [261](#).
 ——— of Bacchus, vol. [i](#) [262](#).
 ——— Group of Pieta, in St. Peter's, vol. [i](#) [263](#).
 ——— of David, vol. [i](#) [263](#).
 ——— equestrian one of Marcus Aurelius, vol. [i](#) [282](#).
 ——— Farnese Bull, discovered in the Baths of Antoninus, vol. [i](#) [283](#).
 ——— Hercules, vol. [i](#) [284](#).
 ——— Christ taken from the Cross, vol. [i](#) [278](#).
 Rhodes, 3000 at, vol. [i](#) [44](#).
 Versailles, the Milo Crotona at, vol. ii. [242](#).
 Venus, martial, vol. [i](#) [27](#).
 Stone, the art of cutting first practised, vol. [i](#) [16](#).

T.

- Temples. The most celebrated erected in the space of three centuries, vol. [i. 42.](#)
- Antoninus and Faustinae, at Rome, vol. [i. 103.](#)
- Apollo Panionios, at Ionia, vol. [i. 9.](#)
- at Lebadea, in Bœotia, vol. [i. 9.](#)
- at Delphos, vol. [i. 9, 21, 22.](#)
- at Delos, vol. [i. 15.](#)
- at Epidaurus, vol. [i. 102.](#)
- at Abæ, vol. [i. 101.](#)
- at Miletus, vol. [i. 33, 53.](#)
- at Tegea, vol. [i. 28.](#)
- the Helper, near Cotyion, vol. [i. 51.](#)
- on the Palatine, at Rome, vol. [i. 80.](#)
- Arsinoë, in honour of, at Alexandria, vol. [i. 71.](#)
- Augustus, at Corunna, vol. [i. 90.](#)
- at Pozzuolo, vol. [i. 86.](#)
- Bacchus, at Teos, in Asia Minor, vol. [i. 16.](#)
- at Rhodes, vol. [i. 44.](#)
- Balbec, thereat described, vol. [i. 62, 64.](#)
- Ceres and Proserpine, at Tegea, vol. [i. 28, 58.](#)
- at Eleusis, vol. [i. 33, 50.](#)
- one to, erected at the expense of Pliny, vol. [i. 93.](#)
- Diana, in Magnesia, in Asia Minor, vol. [i. 17.](#)
- at Ephesus, vol. [i. 23, 33, 53.](#)
- rebuilt, vol. [i. 71.](#)
- at Rhodes, vol. [i. 44.](#)
- at Tegea, vol. [i. 58.](#)
- at Tarragona, in Spain, vol. [i. 90.](#)
- Epidaurus, one at, to all the gods, vol. [i. 101.](#)
- Esculapius, at Tralles, in Asia Minor, vol. [i. 33.](#)
- at Epidaurus, vol. [i. 102.](#)
- Honour and Virtue, at Rome, vol. [i. 77.](#)
- Isis, at Rhodes, vol. [i. 44.](#)
- Juno, at Eubœa, vol. [i. 29.](#)
- Lacinia described, vol. [i. 30.](#)
- at Samos, vol. [i. 18, 19, 21.](#)
- at Olympia, vol. [i. 40.](#)
- at Athens, raised by Hadrian, vol. [i. 101.](#)
- at Jerusalem attempted to be rebuilt, vol. [i. 106.](#)
- Jupiter, at Athens, vol. [i. 33.](#)
- Belus, vol. [i. 3.](#)
- Olympius, erected under Pisistratus, vol. [i. 33.](#)
- finished, vol. [i. 75, 100.](#)
- at Agrigentum, vol. [i. 38.](#)

- Temples. Jupiter, at Pisa, in Olympia, vol. [i. 39.](#)
 ——— Capitoline, at Rome, vol. [i. 75, 81.](#)
 ——— Stator, at Rome, portico added, vol. [i. 76.](#)
 ——— Tonans, at Rome, vol. [i. 80.](#)
 ——— Panhellenius, at Athens, vol. [i. 101.](#)
 Justice, at Rome, its brazen ceiling, vol. [i. 21.](#)
 Mars, in the Circus Flaminius, vol. [i. 76.](#)
 ——— the Avenger, at Rome, vol. [i. 80.](#)
 Minerva Polias, at Prienne, vol. [i. 57.](#)
 ——— called Chalciæcus, vol. [i. 21, 27.](#)
 ——— at Athens, lamp of, vol. [i. 31.](#)
 ——— Parthenon at Athens described, vol. [i. 45, 50.](#)
 Neptune, equestrian, near Mantinea, vol. [i. 101.](#)
 ——— at Rome, vol. [i. 80.](#)
 Ocridione, at Rhodes, vol. [i. 44.](#)
 Palmyra, thereat described, vol. [i. 67.](#)
 of Peace, at Rome, vol. [i. 89.](#)
 Sun, at Rhodes, called Haleum, vol. [i. 44.](#)
 Syria, to the goddess of that name, vol. [i. 69.](#)
 Theseus, at Athens, vol. [i. 45.](#)
 Trajan, in honour of at Alcantara, vol. [i. 96, 97.](#)
 ——— magnificent one at Rome, vol. [i. 99.](#)
 Venus. Paphian, at Tegea, vol. [i. 28.](#)
 ——— and Rome, designed by Adrian, vol. [i. 96.](#)
 Vulcan, at Memphis, vol. [i. 12.](#)
- Theatres. Argos, vol. [i. 59](#) (ancient).
 Athens commenced, vol. [i. 59](#) (ancient).
 Amsterdam, vol. ii. [187.](#)
 Arcadia, ancient one at Megalopolis, vol. [i. 53.](#)
 Bassano, vol. ii. [379.](#)
 Bologna, one altered at, vol. ii. [263.](#)
 Buratini, Ottoboni at, vol. ii. [308.](#)
 Castel Franco, vol. ii. [377.](#)
 Chambord, in Saxony, vol. ii. [332.](#)
 Dresden, vol. ii. [332.](#)
 Epidaurus, ancient one at, vol. [i. 53.](#)
 Fortune, at Fano, vol. ii. [196.](#)
 S. Giovanni e S. Paolo, at Venice, vol. ii. [195.](#)
 Lorraine, vol. ii. [262.](#)
 Naples, Nuova, vol. ii. [321.](#)
 Nicæa, in Asia Minor, ancient one at, vol. [i. 92.](#)
 Oxford, vol. ii. [286.](#)
 Pergola, vol. ii. [263.](#)
 Pistoja, vol. ii. [263.](#)
 Rome, thereat, surpassed the Greeks, vol. [i. 59.](#)
 ——— Marcellus, ancient, vol. [i. 80, 84.](#)
 ——— one appropriated to music at, vol. [i. 94.](#)
 ——— of Pompey at, rebuilt, vol. [i. 113.](#)

- Theatres. Rome. The manner of covering first-invented, vol. i. 78.
 ——— modern ones at, very defective, vol. ii. 263.
 ——— Argentina, vol. ii. 330.
 ——— of the Aliberti at, vol. ii. 263.
 Scamozzi, one erected by, vol. ii. 95.
 Sienna, vol. ii. 263.
 Sparta, ancient one at, vol. i. 59.
 Tordinona, vol. ii. 264.
 Treviso, vol. ii. 382.
 Verona, vol. ii. 262.
 Vicenza, the Olympic Academy at, vol. ii. 41.
 Vienna, vol. i. 96.
 ——— large one at, vol. ii. 262.
- Tiles, invented by Agriopus, vol. i. 16.
- Tirynthus, walls of, built by the Cyclops, vol. i. 11.
- Tivoli, cascade at, vol. ii. 87.
- Tower of the Winds, at Athens, vol. i. 28.
 ——— invented by the Cyclops, vol. i. 16.
- Treasure discovered by Herodes Atticus, vol. i. 37.
- Treasury at Olympia, for the Carthaginians, vol. i. 55.
 ——— of Hyrieus plundered, vol. i. 10.
 ——— of Rhamsinatus broken open, vol. i. 10.
 ——— of Minyas, in Orchomenos, vol. i. 11.
 ——— at Olympia, for the Epidamnians, vol. i. 54.
- Treatise on Architecture, vol. i. 32.
 ——— on the proportions of the Doric order, vol. i. 52.
 ——— various, on the orders, vol. i. 79.
- Turning lathe invented, vol. i. 14.
- Tuscan order, description of, and its proportions, vol. i. x.
 ——— parallel of, vol. ii. 98.

V.

- Venice founded, vol. i. 108, 238.
 ——— marble columns in the Piazza of, vol. i. 139.
 ——— Horses celebrated of, in bronze, vol. i. 140.
- Via Domitiana formed, vol. i. 91.
- Vitruvius, errors corrected in, vol. i. 237.
 ——— translated, vol. i. 229.

W.

Water, a work on its weight and motion, vol. i. 214.

Wells, first dug, vol. i. 16.

——- at Orvietto curiously contrived, vol. i. 233.

——- at Chambord, in France, and Turin, vol. i. 233.

Z.

Zenobia, in Syria, built, vol. i. 120.

THE END.

London. Printed at the Temple Printing Office.

BY G. GOWEN, FOLKINGHAM STREET.

Works lately Published,

ARCHITECTURAL ANTIQUITIES OF ROME,

Measured and delineated by G. L. TAYLOR and EDWARD CRESY,
Architects, and Fellows of the Society of Antiquaries;

Consisting of One Hundred and Thirty Plates, with Accounts of the
Buildings. In 2 vols. folio, price Eighteen Guineas; or, on India
Paper, Twenty-Four Guineas.

Published by G. L. TAYLOR, Spring Gardens, and by EDWARD
CRESY, 6, Suffolk Street, Pall Mall East.

REVIVED ARCHITECTURE OF ITALY. Selected
from Palaces, Churches, and other Edifices; in which the Architecture
of the Ancients has been most successfully appropriated to domestic
Purposes.

Measured and delineated by G. L. TAYLOR and EDWARD CRESY,
Architects, F.S.A.

PART I. price £1. 5s. containing some of the Palaces at Genoa.

Preparing for Publication,

**ARCHITECTURE OF THE MIDDLE AGES AT
PISA.** Illustrated by Plans, Sections, Elevations, Details, and Views of
the Baptistery, Campanile, or Leaning Tower, Cathedral, and Campo
Santo; accompanied by Descriptive Accounts of their History and Con-
struction.

By EDWARD CRESY and G. L. TAYLOR, Architects.

